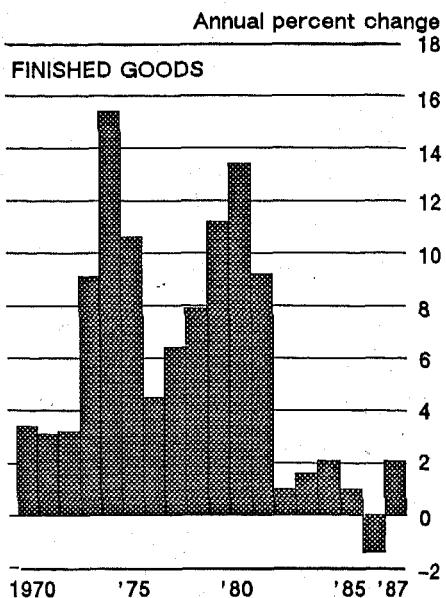
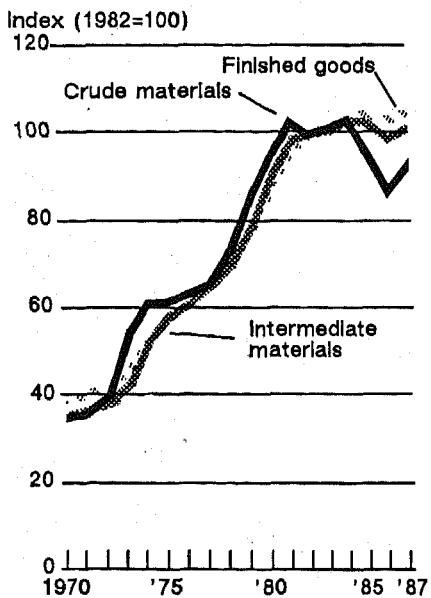
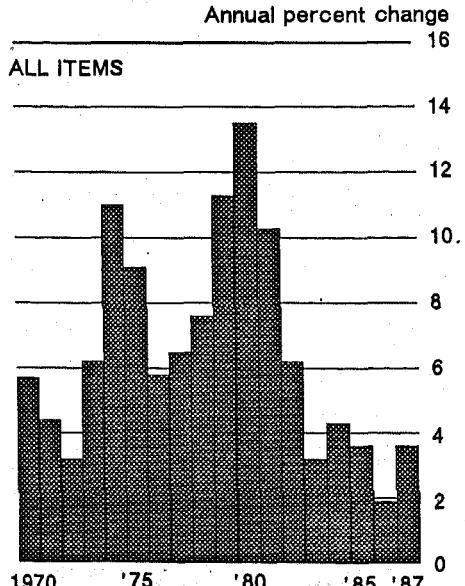
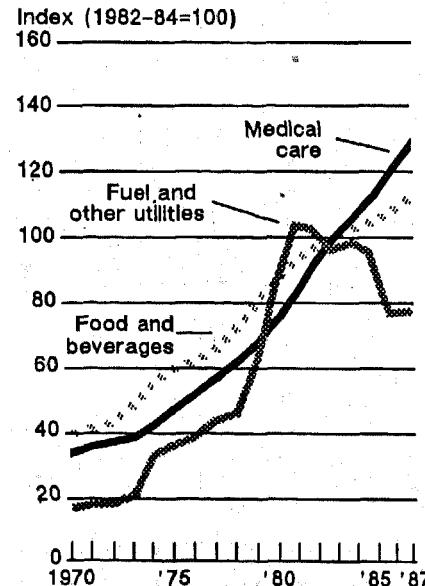


Figure 15.1

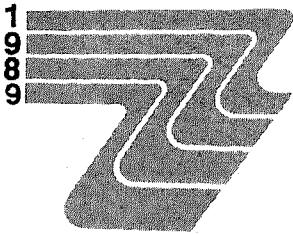
Producer Price Indexes by Stage of Processing: 1970 to 1987

Source: Chart prepared by U.S. Bureau of the Census. For data see tables 749 and 753.

Figure 15.2

Consumer Price Indexes: 1970 to 1987

Source: Chart prepared by U.S. Bureau of the Census. For data see tables 749 and 760.



Section 15

Prices

This section presents indexes of producer and consumer prices, actual prices for selected commodities and energy prices. The primary sources of these data are monthly publications of the Department of Labor, Bureau of Labor Statistics (BLS), which include: *Monthly Labor Review*; *Consumer Price Index, Detailed Report*; *Consumer Prices: Energy and Food*; and *Producer Price Indexes*. The Bureau of Economic Analysis of the Department of Commerce is the source for the gross national product Implicit price deflators; see table 751. The Department of Agriculture's Economic Research Service (ERS) produces indexes of prices received and prices paid by farmers; see section 23.

The Bureau of Labor Statistics prepares monthly indexes of producer prices for a large selection of commodities, and monthly indexes of consumer prices for both commodities and services.

Producer price index.—This index, dating from 1890, is the oldest continuous statistical series published by BLS. It is designed to measure average changes in prices received by producers of all commodities, at all stages of processing, produced in the U.S.

The index has undergone several revisions (see *Monthly Labor Review*, February 1962 and April 1978). It is now based on approximately 3,400 commodity price series instead of the approximately 3,200 included in the 1947-1960 period and the 900 included for the period prior to 1947. Indexes for the net output of mining and manufacturing industries have been added in recent years. Prices used in constructing the index are collected from sellers, and generally apply to the first significant large-volume commercial transaction for each commodity—i.e., the manufacturer's or other producer's selling price or the selling price on an organized exchange or at a central market.

The weights used in the index represent the total net selling value of commodities produced or processed in this country. Values are f.o.b. production point and are exclusive of excise taxes. Effective with the release of data for January 1988, many important producer price indexes were changed to a new reference base year, 1982=100, from 1967=100. The base year 1982 coincides with the reference year of the PPI shipment weights, which have been taken primarily from the 1982 Census of Manufactures.

Consumer price indexes (CPI).—The CPI is a measure of the average change in prices over time in a fixed "market basket" of goods and services purchased either by urban wage earners and clerical workers or by all urban consumers.

In 1919, BLS began to publish complete indexes at semiannual intervals, using a weighting structure based on data collected in the expenditure survey of wage-earner and clerical-worker families in 1917-19 (BLS Bulletin 357, 1924). The first major revision of the CPI occurred in 1940, with subsequent revisions in 1953, 1964, 1978, and 1987.

Beginning with the release of data for January 1988 in February 1988, most Consumer Price Indexes shifted to a new reference base year. All indexes previously expressed on a base of 1967=100, or any other base through December 1981, have been rebased to 1982-84=100. Selection of the 1982-84 period was made to coincide with the updated expenditure weights, which are based upon data tabulated from the Consumer Expenditure Surveys for 1982, 1983, and 1984.

BLS publishes CPI's for two population groups: (1) a CPI for All Urban Consumers (CPI-U) which covers approximately 80 percent of the total population; and (2) a CPI for Urban Wage Earners and Clerical Workers (CPI-W) which covers 32 percent of the total population. The CPI-U includes, in addition to wage earners and clerical workers, groups which historically have been excluded from CPI coverage, such as professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, and retirees and others not in the labor force.

The current CPI is based on prices of food, clothing, shelter, fuels, transportation fares, charges for doctors' and dentists' services, drugs, etc. purchased for day-to-day living. Prices are collected in 85 areas across the country from over 57,000 housing units and 19,000 establishments. Area selection was based on the 1980 census. All taxes directly associated with the purchase and use of items are included in the index. Prices of food, fuels, and a few other items are obtained every

month in all 85 locations. Prices of most other commodities and services are collected monthly in the five largest geographic areas and every other month in other areas.

In calculating the index, each item is assigned a weight to account for its relative importance in consumers' budgets. Price changes for the various items in each location are then averaged. Local data are then combined to obtain a U.S. city average. Separate indexes are also published for regions, area size-classes, cross-classifications of regions and size-classes, and for 27 local areas, usually consisting of the Metropolitan Statistical Area (MSA); see Appendix II. Area definitions are those established by the Office of Management and Budget in 1983. Definitions do not include revisions made since 1983. Area indexes do not measure differences in the level of prices among cities, they only measure the average change in prices for each area since the base period. For further detail regarding the CPI, see the BLS *Handbook of Methods*, Bulletin 2285, Chapter 19: the Consumer Price Index, and Report 736, the CPI: 1987 Revision.

In January 1983, the method of measuring homeownership costs in the CPI-U was changed to a rental equivalence approach. This treatment calculates homeowner costs of the shelter based on the implicit rent owners would pay to rent the homes they own. The rental equivalence approach was introduced into the CPI-W in January 1985.

Other price indexes.—The fixed-weighted price index is a weighted average of the detailed price indexes used in the deflation of goods and services that make up the GNP. These price indexes are combined using weights that reflect the composition of GNP in 1982. Because the same weights are used for each period, changes in this index measure changes in prices over any period. The chain price index is an alternative measure of price change. It is a weighted average of the same detailed price indexes, but they are combined using weights that reflect the composition of GNP in the first of two consecutive periods. Thus, changes in this index measure changes in prices only between the consecutive periods.

The implicit price deflator is a by-product of the deflation of GNP. It is derived as the ratio of current- to constant-dollar GNP (multiplied by 100). It is a weighted average of the detailed price indexes used in the deflation of GNP, but they are combined using weights that reflect the composition of GNP in each period. Thus, changes in the implicit price deflator reflect not only changes in prices but also changes in the composition of GNP.

Statistical reliability.—For a discussion of statistical collection and estimation, sampling procedures, and measures of statistical reliability pertaining to the producer price index and the CPI, see Appendix III.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

NO. 748. PURCHASING POWER OF THE DOLLAR: 1950 TO 1987

(Indexes: PPI, 1982=\$1.00; CPI, 1982-84=\$1.00. Producer prices prior to 1961, and consumer prices prior to 1964, exclude Alaska and Hawaii. Producer prices based on finished goods index. Obtained by dividing the average price index for the 1982=100, PPI; 1982-84=100, CPI base periods (100.0) by the price index for a given period and expressing the result in dollars and cents. Annual figures are based on average of monthly data.)

YEAR	ANNUAL AVERAGE AS MEASURED BY—		YEAR	ANNUAL AVERAGE AS MEASURED BY—		YEAR	ANNUAL AVERAGE AS MEASURED BY—	
	Producer prices	Consumer prices		Producer prices	Consumer prices		Producer prices	Consumer prices
1950.....	\$3.546	\$4.151	1963.....	\$2.994	\$3.285	1976.....	\$1.845	\$1.757
1951.....	3.247	3.846	1964.....	2.985	3.220	1977.....	1.545	1.649
1952.....	3.288	3.785	1965.....	2.933	3.166	1978.....	1.433	1.532
1953.....	3.300	3.735	1966.....	2.841	3.080	1979.....	1.289	1.380
1954.....	3.289	3.717	1967.....	2.809	2.993	1980.....	1.136	1.215
1955.....	3.279	3.732	1968.....	2.732	2.873	1981.....	1.041	1.098
1956.....	3.195	3.678	1969.....	2.632	2.726	1982.....	1.000	1.035
1957.....	3.077	3.549	1970.....	2.545	2.574	1983.....	.984	1.003
1958.....	3.012	3.457	1971.....	2.469	2.468	1984.....	.964	.961
1959.....	3.021	3.427	1972.....	2.382	2.391	1985.....	.955	.928
1960.....	2.994	3.373	1973.....	2.183	2.251	1986.....	.969	.913
1961.....	2.994	3.340	1974.....	1.901	2.029	1987.....	.949	.880
1962.....	2.985	3.304	1975.....	1.718	1.859			

Source: U.S. Bureau of Labor Statistics. Monthly data in U.S. Bureau of Economic Analysis, *Survey of Current Business*.

Price Indexes—Spot Primary Market Prices

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No. 749. ANNUAL PERCENT CHANGE IN SELECTED PRICE INDEXES: 1960 TO 1987

[Yearly averages. Minus sign (−) indicates decrease. GNP=Gross national product; see text, section 15]

YEAR OR PERI- OD	CONSUMER PRICES (1982=100)					PRODUCER PRICES (1982=100)					GNP DEFULATOR ² (1982=100)				
	All items	Food	Fuel oil and other house- hold fuel commodi- ties ¹	Gas (piped) and elec- tricity	Rent	Serv- ices	Finished goods		Inter- mediate goods	Crude goods		Gross do- mestic prod- uct, total	Gross do- mestic busi- ness prod- uct	Gross non- farm busi- ness prod- uct	PCE ³
							Total	Con- sumer goods		Total	Fuel				
1960 ⁴	1.7	1.0	−.7	4.0	1.3	3.4	.9	.9	−	−2.3	1.0	1.6	1.2	1.2	1.9
1961...	1.0	1.3	2.2	.9	1.3	1.7	−	−	−	−.7	−	1.0	.9	.6	1.2
1962...	1.0	.7	.7	−	1.3	2.0	−.3	−.3	−	1.0	−1.0	2.2	1.8	2.1	1.8
1963...	1.3	1.6	1.4	−	1.0	2.0	−.3	−.6	−	−2.0	1.0	1.6	.9	.9	1.5
1964...	1.3	1.3	−	−	1.0	2.0	.3	.3	−	−1.0	−	1.5	1.2	1.2	1.7
1965...	1.6	2.2	1.4	−	1.0	2.3	1.8	1.8	−	5.1	1.0	2.7	2.3	2.0	1.7
1966...	2.9	5.0	2.7	.4	1.5	3.8	3.2	3.5	−	6.4	2.8	3.6	3.1	2.8	3.1
1967...	3.1	.9	3.3	.4	1.7	4.3	1.1	.6	−	−5.4	3.7	2.6	2.5	3.0	2.5
1968...	4.2	3.5	3.2	.8	2.6	5.2	2.8	2.5	−	1.6	1.8	5.0	4.6	4.3	4.5
1969...	5.5	5.1	1.8	1.7	3.2	6.9	3.8	3.8	3.3	6.8	4.3	5.6	4.9	4.8	4.3
1970...	5.7	5.7	4.3	4.5	4.0	8.0	3.4	9.2	3.8	3.8	15.0	5.5	4.7	4.9	4.6
1971...	4.4	3.1	7.1	6.7	4.7	5.7	3.1	2.8	4.0	−2.3	13.8	5.7	4.9	4.9	4.7
1972...	3.2	4.2	.5	5.2	3.5	3.8	3.2	3.2	3.8	10.8	7.0	4.7	4.0	3.8	4.0
1973...	6.2	14.5	15.3	4.9	4.2	4.4	9.1	10.8	11.0	36.6	10.7	6.5	6.4	4.7	6.2
1974...	11.0	14.3	57.3	15.4	5.1	9.2	15.4	23.8	12.7	33.3	9.1	9.3	9.7	10.5	10.5
1975...	9.1	8.5	9.6	16.2	5.1	9.6	10.6	9.6	10.5	−	23.4	9.8	10.0	10.7	8.0
1976...	5.8	3.0	6.6	11.5	5.3	8.3	4.5	3.8	5.0	2.9	12.7	6.4	6.0	6.3	5.7
1977...	6.5	6.3	13.1	13.0	6.1	7.7	6.4	6.5	6.6	3.3	21.7	6.7	6.6	6.7	6.5
1978...	7.6	9.9	5.2	8.9	6.9	9.6	7.9	7.9	7.1	12.1	14.8	7.3	7.3	7.0	7.3
1979...	11.3	11.0	35.1	10.9	7.2	11.0	11.2	11.7	12.8	17.0	18.9	8.9	9.0	8.8	9.2
1980...	13.5	8.6	38.0	17.0	8.8	15.4	13.4	14.3	15.2	10.8	21.1	9.0	9.1	9.7	10.7
1981...	10.3	7.8	21.5	14.7	8.7	13.1	9.2	9.0	9.2	8.1	22.2	8.7	9.7	9.8	9.2
1982...	6.2	4.1	−1.1	13.8	7.6	9.0	4.1	3.5	1.4	−2.9	17.9	6.4	6.0	6.4	5.7
1983...	3.2	2.1	−6.0	8.9	5.8	3.5	1.6	1.3	.6	−1.3	5.1	3.8	3.5	3.6	4.1
1984...	4.3	3.8	2.3	3.8	5.2	5.2	2.1	2.0	2.5	−	2.2	3.7	3.5	3.2	3.8
1985...	3.6	2.3	−3.5	1.6	6.2	5.1	1.0	−.5	−4.4	−7.4	−2.3	3.1	2.7	3.3	3.2
1986...	1.9	3.2	−19.1	−1.3	5.8	5.0	−1.4	−2.3	−3.5	−8.5	−10.2	2.6	2.5	2.6	2.4
1987...	3.6	4.1	.4	−1.6	4.1	4.2	2.1	2.2	2.4	6.8	−8.8	3.3	2.9	3.0	4.5
1980- 65 ⁶	1.3	1.4	1.1	.2	1.1	2.0	.4	.4	.3	.5	.2	1.8	1.4	1.4	1.6
1985-															
70 ⁵	4.3	4.0	3.1	1.6	2.6	5.6	2.9	2.7	2.6	2.5	5.4	4.4	3.9	4.0	3.8
1970- 75 ⁵	6.8	8.8	16.4	9.6	4.5	6.5	8.2	8.3	10.4	11.8	17.3	7.1	6.9	6.7	6.7
1975- 80 ⁵	8.9	7.7	18.8	12.2	6.8	10.2	8.6	8.8	9.3	9.1	17.8	7.6	7.7	7.7	7.9
1980- 85 ⁵	5.5	4.0	2.2	8.4	6.7	7.1	3.5	3.2	2.6	.1	8.2	5.3	5.1	5.2	5.2

¹ Represents zero. ² Includes bottled gas. ³ Implicit price deflator. Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July 1988.

³ PCE=Personal consumption expenditures. See table 751. ⁴ Base year for percent change is 1959. ⁵ Average annual percent change. For explanation of average annual percent change, see Guide to Tabular Presentation.

Source: Except as noted, U.S. Bureau of Labor Statistics, *Monthly Labor Review*.

No. 750. INDEXES OF SPOT PRIMARY MARKET PRICES: 1970 TO 1988

[1967=100. Index computed weekly through 1981; daily, beginning May 27, 1981. Represents unweighted geometric average of price quotations of 22 commodities. This index is much more sensitive to changes in market conditions than is a monthly producer price index.]

ITEM AND NUMBER OF COMMODITIES	1970 (6-16)	1975 (6-24)	1979 (6-26)	1980 (6-24)	1981 (5-26)	1982 (5-25)	1983 (5-23)	1984 (5-22)	1985 (5-21)	1986 (5-20)	1987 (5-26)	1988 (5-27)
All commodities (22).....	113.6	189.9	281.3	265.1	267.9	247.6	249.8	293.9	251.4	218.0	250.0	270.3
Foodstuffs (9).....	112.2	215.3	265.1	260.9	244.2	252.8	246.1	299.9	248.1	205.5	215.2	230.1
Raw industrials (13).....	114.4	174.1	293.0	268.0	285.4	249.9	252.3	289.7	253.6	226.9	277.3	302.0
Livestock and products (5).....	123.6	240.8	336.3	250.5	265.2	312.1	278.1	364.5	284.5	231.2	303.3	316.1
Metals (5).....	125.2	166.8	332.8	257.9	287.3	218.2	225.9	253.4	220.2	191.2	239.9	276.7
Textiles and fibers (4).....	99.9	158.8	192.2	234.7	243.0	206.6	208.0	248.1	220.8	216.9	247.1	247.3
Fats and oils (4).....	128.6	213.6	289.4	229.5	238.7	255.7	225.9	363.5	273.1	168.5	201.2	230.4

Source: 1970-1981, U.S. Bureau of Labor Statistics, *Tuesday Spot Market Price Indexes and Prices*, weekly and monthly, thereafter, Commodity Research Bureau, a Knight-Ridder Business Information Service, New York, NY, *CRB Commodity Index Report*, weekly (copyright).

NO. 751. GROSS NATIONAL PRODUCT [IMPLICIT PRICE DEFATORS: 1970 TO 1987]

[1982=100. Minus sign (-) indicates decrease. For explanation of average annual percent change, see Guide to Tabular Presentation]

YEAR OR PERIOD	Gross national product	Personal consumption expenditures	FIXED INVESTMENT ¹			Exports	Imports	Govt. purchases of goods and services	Final sales
			Total	Residential	Nonresidential				
1970	42.0	42.9	39.0	37.0	39.9	38.7	29.0	38.1	42.0
1971	44.4	44.9	41.2	39.0	42.4	40.4	30.2	41.0	44.4
1972	46.5	46.7	43.2	41.2	44.4	41.7	32.0	43.8	46.5
1973	49.5	49.6	45.6	44.8	46.0	47.1	35.5	47.1	49.5
1974	54.0	54.8	50.3	49.8	50.5	56.3	50.4	52.2	54.1
1975	59.3	59.2	56.9	54.2	57.9	62.1	54.1	57.7	59.2
1976	63.1	62.6	60.7	58.0	61.9	64.8	55.7	61.5	63.0
1977	67.3	66.7	65.6	64.6	66.1	68.0	59.8	65.8	67.2
1978	72.2	71.6	71.9	72.6	71.5	72.8	65.8	70.4	72.1
1979	78.6	78.2	78.9	81.4	77.8	81.6	77.1	76.8	78.5
1980	85.7	86.6	86.3	89.4	85.1	90.2	96.0	85.5	85.8
1981	94.0	94.6	94.2	96.6	93.4	97.5	101.6	93.4	93.9
1982	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1983	103.9	104.1	99.8	102.2	98.8	101.3	97.4	104.0	103.9
1984	107.7	108.1	100.2	106.0	97.9	103.2	97.1	108.6	107.7
1985	110.9	111.6	100.6	108.3	97.7	101.0	95.2	112.3	110.9
1986	113.9	114.3	103.5	111.1	100.2	100.0	93.6	114.6	114.0
1987	117.7	119.5	105.2	116.2	100.4	100.0	99.0	118.5	117.7
AVERAGE ANNUAL PERCENT CHANGE									
1970-1975	7.1	6.7	7.9	7.9	7.7	9.8	13.3	8.7	7.1
1975-1980	7.6	7.9	8.7	10.5	8.0	7.8	12.2	8.2	7.7
1980-1985	5.4	5.2	3.1	3.9	2.8	2.4	-3	5.7	5.3
1976	6.4	5.7	6.7	7.0	6.9	4.3	3.0	6.6	6.4
1977	6.7	6.5	8.1	11.4	6.8	4.8	7.4	7.0	6.7
1978	7.3	7.3	9.6	12.4	8.2	7.1	10.0	7.0	7.3
1979	8.9	9.2	8.7	12.1	8.8	12.1	17.2	9.1	8.9
1980	9.0	10.7	9.4	9.8	9.4	10.5	24.5	11.3	9.3
1981	9.7	9.2	9.2	6.1	9.8	8.1	5.8	9.2	9.4
1982	6.4	5.7	6.2	3.5	7.1	2.6	-1.6	7.1	6.5
1983	3.9	4.1	-2	2.2	-1.2	1.3	-2.6	4.0	3.9
1984	3.7	3.8	.4	3.7	-.9	1.9	-3	4.4	3.7
1985	3.0	3.2	.4	2.2	-.2	-2.1	-2.0	3.4	3.0
1986	2.7	2.4	2.9	2.6	2.6	-1.0	-1.7	2.0	2.8
1987	3.3	4.5	1.6	4.6	.2	-	5.8	3.4	3.2

- Represents zero. ¹ Gross private domestic fixed investment.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

NO. 752. GROSS NATIONAL PRODUCT FIXED-WEIGHTED PRICE INDEXES: 1970 TO 1987

[1982=100]

ITEM	1970	1975	1979	1980	1981	1983	1984	1985	1986	1987
Gross national product	47.2	61.8	78.8	86.1	94.1	104.1	108.3	111.9	115.0	119.1
Personal consumption expenditures										
Durable goods	44.7	60.1	78.6	86.8	94.6	104.2	108.4	112.2	115.3	120.4
Nondurable goods	55.0	66.7	82.5	89.6	95.8	102.3	104.1	105.2	106.5	109.7
Services	45.2	63.2	80.8	89.6	97.0	102.1	105.2	107.9	107.8	112.6
Gross private domestic investment:										
Fixed investment	61.5	69.0	80.3	86.9	94.5	100.4	101.5	103.3	105.8	108.8
Residential	68.4	73.1	80.1	86.1	93.9	99.9	100.2	101.9	104.3	106.8
Structures	32.6	52.5	75.0	83.1	93.2	97.3	98.1	100.7	101.8	105.1
Producers' durable equipment	91.3	86.3	83.4	88.1	94.4	101.5	101.8	102.6	106.3	107.9
Residential	37.4	54.6	81.2	89.4	96.8	102.2	106.0	108.3	110.9	115.9
Exports of goods and services	43.3	65.4	82.9	90.5	97.7	101.6	104.3	103.7	103.9	106.0
Imports of goods and services	33.4	59.7	80.9	96.3	101.5	97.7	97.5	95.7	93.6	100.8
Government purchases of goods and services										
Federal	39.6	58.6	77.3	86.3	94.1	104.5	109.2	113.2	115.6	119.6
National defense	39.5	59.4	76.8	86.4	94.9	104.1	108.0	110.4	110.8	113.5
Nondefense	(NA)	56.5	75.1	84.7	93.8	103.7	107.6	110.5	111.3	114.0
State and local	39.6	57.9	77.7	86.2	93.5	104.8	110.1	115.3	119.1	124.1
Addenda:										
Final sales	47.2	61.8	78.8	86.1	94.1	104.1	108.2	111.8	114.9	119.0
Personal consumption expenditures, food	43.0	63.6	82.1	88.7	96.0	102.0	106.3	108.6	112.2	117.2
Personal consumption expenditures, energy	27.0	44.0	66.8	86.4	98.1	101.0	102.3	103.5	91.0	91.7
Other personal consumption expenditures	47.4	61.2	79.1	86.4	93.9	105.3	109.7	114.3	119.1	124.9

NA Not available.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-1982*, and *Survey of Current Business*, July issues.

NO. 753. PRODUCER PRICE INDEXES, BY STAGE OF PROCESSING: 1950 TO 1987

[1982=100. See text, section 15. See also *Historical Statistics, Colonial Times to 1970*, series E 73-86]

YEAR	Crude materials	Crude food-stuffs and feed-stuffs	Crude energy materials	Intermediate goods	Finished goods	Finished consumer foods	Finished energy goods	Capital equipment
1950.....	32.7	43.4	(NA)	25.3	28.2	32.7	(NA)	23.2
1951.....	37.6	50.2	(NA)	28.4	30.8	36.7	(NA)	25.5
1952.....	34.5	47.3	(NA)	27.5	30.6	36.4	(NA)	25.9
1953.....	31.9	42.3	(NA)	27.7	30.3	34.5	(NA)	26.3
1954.....	31.6	42.3	(NA)	27.9	30.4	34.2	(NA)	26.7
1955.....	30.4	38.4	(NA)	28.4	30.5	33.4	(NA)	27.4
1956.....	30.6	37.6	(NA)	29.6	31.3	33.3	(NA)	29.5
1957.....	31.2	39.2	(NA)	30.3	32.5	34.4	(NA)	31.3
1958.....	31.9	41.6	(NA)	30.4	33.2	36.5	(NA)	32.1
1959.....	31.1	38.8	(NA)	30.8	33.1	34.8	(NA)	32.7
1960.....	30.4	38.4	(NA)	30.8	33.4	35.5	(NA)	32.8
1961.....	30.2	37.9	(NA)	30.8	33.4	35.4	(NA)	32.9
1962.....	30.5	38.6	(NA)	30.6	33.5	35.7	(NA)	33.0
1963.....	29.9	37.5	(NA)	30.7	33.4	35.3	(NA)	33.1
1964.....	29.6	36.6	(NA)	30.8	33.5	35.4	(NA)	33.4
1965.....	31.1	39.2	(NA)	31.2	34.1	36.8	(NA)	33.8
1966.....	33.1	42.7	(NA)	32.0	35.2	39.2	(NA)	34.6
1967.....	31.3	40.3	(NA)	32.2	35.6	38.5	(NA)	35.8
1968.....	31.8	40.9	(NA)	33.0	36.6	40.0	(NA)	37.0
1969.....	33.9	44.1	(NA)	34.1	38.0	42.4	(NA)	38.3
1970.....	35.2	45.2	(NA)	35.4	39.3	43.8	(NA)	40.1
1971.....	36.0	46.1	(NA)	36.8	40.5	44.5	(NA)	41.7
1972.....	39.9	51.5	(NA)	38.2	41.8	46.9	(NA)	42.8
1973.....	54.5	72.6	(NA)	42.4	45.6	56.5	(NA)	44.2
1974.....	61.4	76.4	27.8	52.5	52.6	64.4	26.2	50.5
1975.....	61.6	77.4	33.3	58.0	58.2	69.8	30.7	58.2
1976.....	63.4	76.8	35.3	60.9	60.8	69.6	34.3	62.1
1977.....	65.5	77.5	40.4	64.9	64.7	73.3	39.7	66.1
1978.....	73.4	87.3	45.2	69.5	69.8	79.8	42.3	71.3
1979.....	85.9	100.0	54.9	78.4	77.6	87.3	57.1	77.5
1980.....	95.3	104.6	73.1	90.3	88.0	82.4	85.2	85.8
1981.....	103.0	103.9	97.7	98.6	96.1	97.8	101.5	94.6
1982.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1983.....	101.3	101.8	98.7	100.6	101.6	101.0	95.2	102.8
1984.....	103.5	104.7	98.0	103.1	103.7	105.4	91.2	105.2
1985.....	95.8	94.8	93.3	102.7	104.7	104.6	87.6	107.5
1986.....	87.7	93.2	71.8	99.1	103.2	107.3	63.0	109.7
1987.....	93.7	96.2	75.0	101.5	105.4	109.5	61.8	111.7

NA Not available.

Source: U.S. Bureau of Labor Statistics, *Supplement to Producer Price Indexes*, 1987.

NO. 754. PRODUCER PRICE INDEXES—MAJOR COMMODITY GROUPS: 1950 TO 1987

[1982=100. Prior to 1981, excludes Alaska and Hawaii. See text, section 15. See also *Historical Statistics, Colonial Times to 1970*, series E 23 and 24]

YEAR	All commodities	Farm products ¹	Industrial commodities	Energy ²	Metals and metal products	YEAR	All commodities	Farm products ¹	Industrial commodities	Energy ²	Metals and metal products
1950.....	27.3	37.7	25.0	12.6	22.0	1969.....	95.6	43.4	33.9	14.6	36.0
1951.....	30.4	43.0	27.6	13.0	24.5	1970.....	36.9	44.9	35.2	15.3	38.7
1952.....	29.6	41.3	26.9	13.0	24.5	1971.....	56.1	45.8	36.5	16.6	39.4
1953.....	29.2	38.6	27.2	13.4	25.3	1972.....	39.8	49.2	37.8	17.1	40.9
1954.....	29.3	38.5	27.2	13.2	25.5	1973.....	45.0	63.9	40.3	18.4	44.0
1955.....	29.3	38.6	27.8	13.2	27.2	1974.....	53.5	71.3	49.2	30.1	57.0
1956.....	30.3	36.4	29.1	13.6	29.6	1975.....	58.4	74.0	54.9	35.4	61.5
1957.....	31.2	37.7	29.8	14.3	30.2	1976.....	61.1	73.6	58.4	38.3	65.0
1958.....	31.6	39.4	30.0	13.7	30.0	1977.....	64.9	75.9	62.5	43.6	69.3
1959.....	31.7	37.6	30.5	13.7	30.6	1978.....	69.9	83.0	67.0	46.5	75.3
1960.....	31.7	37.7	30.5	13.9	30.6	1979.....	78.7	92.3	75.7	58.9	86.0
1961.....	31.6	37.7	30.4	14.0	30.5	1980.....	89.8	98.3	88.0	82.8	95.0
1962.....	31.7	38.1	30.4	14.0	30.2	1981.....	98.0	101.1	97.4	100.2	99.6
1963.....	31.6	37.7	30.3	13.9	30.3	1982.....	100.0	100.0	100.0	100.0	100.0
1964.....	31.6	37.5	30.5	13.5	31.1	1983.....	101.3	102.0	101.1	95.9	101.8
1965.....	32.3	39.0	30.9	13.8	32.0	1984.....	103.7	105.5	103.3	94.8	104.8
1966.....	33.3	41.6	31.5	14.1	32.8	1985.....	103.2	100.7	103.7	91.4	104.4
1967.....	33.4	40.2	32.0	14.4	33.2	1986.....	100.2	101.2	100.0	69.8	103.2
1968.....	34.2	41.1	32.8	14.3	34.0	1987.....	102.8	103.7	102.6	70.2	107.1

¹ Processed foods and feeds.² Fuels, related products, and power.Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly and annual.

NO. 755. PRODUCER PRICE INDEXES, FOR SELECTED COMMODITIES: 1970 TO 1987

[1982 = 100. See text, section 15, and *Historical Statistics, Colonial Times to 1970*, series E 23-29]

COMMODITY GROUP	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
All commodities ¹	38.1	58.4	78.7	89.8	98.0	100.0	101.3	103.7	103.2	100.2	102.8
Farm products and processed foods and feeds ¹	44.9	74.0	92.3	98.3	101.1	100.0	102.0	105.5	100.7	101.2	103.7
Farm products ¹	45.8	77.0	99.6	102.9	105.2	100.0	102.4	105.5	95.1	92.9	95.5
Fresh and dried fruits, vegetables.	44.0	72.4	90.3	94.1	105.4	100.0	103.3	109.6	102.7	103.9	106.8
Grains	46.8	106.2	101.8	113.3	117.8	100.0	114.0	113.7	96.1	79.3	71.1
Livestock	45.3	72.9	100.9	98.0	96.2	100.0	94.3	97.7	89.2	91.8	102.0
Live poultry	51.9	98.9	101.2	105.3	104.8	100.0	107.6	125.4	117.9	129.7	101.2
Plant and animal fibers	44.5	75.5	103.4	133.6	119.2	100.0	111.9	112.6	97.5	88.4	106.5
Fluid milk	40.8	63.8	88.5	98.0	101.7	100.0	99.8	98.5	93.7	91.0	91.9
Eggs	71.0	89.4	98.8	95.7	104.7	100.0	(NA)	117.9	95.7	99.6	87.6
Hay, hayseeds, and oilseeds	46.7	94.1	114.8	116.1	128.8	100.0	116.0	120.5	96.8	92.8	101.4
Processed foods and feeds ¹	44.6	72.6	88.5	95.9	98.9	100.0	101.8	105.4	103.5	105.4	107.9
Cereal and bakery products	42.4	70.1	82.9	93.0	100.7	100.0	102.8	106.6	110.3	111.0	112.6
Meats, poultry, and fish	45.0	74.2	93.9	94.4	95.6	100.0	95.7	98.8	95.9	100.2	104.9
Dairy products	44.7	62.6	84.9	92.7	98.7	100.0	100.7	101.1	100.2	99.9	101.6
Processed fruits and vegetables	40.3	61.9	80.9	83.3	93.2	100.0	101.1	107.3	108.0	104.9	108.6
Sugar and confectionery	42.9	94.3	79.6	118.6	102.3	100.0	108.6	111.7	107.9	109.7	112.7
Beverages and beverage materials	44.0	82.2	82.0	90.7	96.5	100.0	102.6	106.3	107.7	114.6	112.5
Animal fats and oils	46.3	112.8	105.8	92.1	98.7	100.0	101.0	128.4	108.9	84.1	86.1
Crude vegetable oils	75.8	130.4	152.7	127.1	116.2	100.0	121.7	164.3	137.6	84.8	84.2
Shortening and cooking oils	47.7	90.2	95.4	99.5	101.6	100.0	108.7	132.9	124.0	103.3	103.9
Miscellaneous processed foods	46.5	71.8	87.1	91.4	100.6	100.0	102.5	111.8	114.1	116.2	119.8
Prepared animal feeds	49.1	81.5	103.8	107.4	109.0	100.0	108.3	104.4	90.1	94.6	98.5
Industrial commodities ¹	35.2	54.9	75.7	88.0	97.4	100.0	101.1	103.3	103.7	100.0	102.6
Textile products and apparel ¹	52.4	67.4	82.5	89.7	97.6	100.0	100.3	102.7	102.9	103.2	105.1
Synthetic fibers	(NA)	73.4	83.1	98.5	100.0	100.0	96.7	98.5	95.5	92.5	91.8
Processed yarns, threads	(NA)	78.9	88.6	99.8	100.0	100.0	100.1	103.2	102.1	101.7	103.8
Gray fabrics	(NA)	87.5	95.0	101.0	100.0	100.0	101.2	105.8	104.4	103.7	107.2
Finished fabrics	(NA)	86.2	92.9	100.5	100.0	100.0	98.9	101.7	101.4	101.4	104.2
Apparel	57.0	68.6	82.5	88.7	95.7	100.0	101.6	103.6	105.0	106.3	108.4
Textile housefurnishings	43.4	63.7	79.8	86.8	95.1	100.0	98.6	100.2	100.6	101.1	101.4
Hides, skins, leather, related products ¹	42.0	56.5	96.1	94.7	99.3	100.0	103.2	109.0	108.9	113.0	120.4
Cattle hides	32.3	51.8	168.3	104.5	100.0	100.0	109.8	143.8	126.1	147.7	179.9
Leather	34.6	48.7	114.6	99.8	102.7	100.0	106.2	119.8	113.4	122.9	140.9
Footwear	46.2	60.3	89.0	95.2	98.3	100.0	102.1	102.7	104.8	106.9	109.4
Fuels, related products, power ¹	15.3	35.4	59.8	82.8	100.2	100.0	95.9	94.8	91.4	69.8	70.2
Coal	26.1	72.2	84.3	87.4	93.0	100.0	100.5	102.2	102.2	100.8	97.1
Coke oven products	27.6	21.7	93.0	93.3	98.8	100.0	96.3	94.5	93.2	88.0	82.8
Gas fuels	8.8	20.4	51.3	71.7	88.6	100.0	108.1	104.5	98.7	83.2	74.1
Electric power	26.1	47.6	66.5	79.1	90.3	100.0	102.8	108.2	111.6	112.6	110.6
Crude petroleum, domestic	14.5	33.5	51.3	75.9	109.5	100.0	92.9	91.3	84.5	46.9	55.5
Petroleum products, refined	19.3	33.8	58.4	88.6	105.8	100.0	89.9	87.4	83.2	53.2	56.8
Chemicals and allied products ¹	35.0	62.0	76.0	89.0	98.4	100.0	100.3	102.9	103.7	102.6	106.4
Industrial chemicals	28.8	58.7	74.9	91.9	103.1	100.0	97.3	95.8	96.0	91.5	95.5
Prepared paint	42.8	63.5	77.8	89.5	95.1	100.0	100.7	103.7	105.3	107.0	108.1
Paint materials	33.3	58.2	79.2	89.9	98.5	100.0	100.4	108.2	109.5	104.4	107.3
Drugs and pharmaceuticals	48.2	60.3	75.0	83.0	92.1	100.0	107.6	114.2	122.0	130.1	139.1
Fats and oils, inedible	49.7	95.5	141.0	111.6	110.7	100.0	106.9	139.1	110.6	80.1	92.7
Agricultural chemicals and products	30.3	69.6	73.3	87.9	97.4	100.0	95.9	97.4	96.2	94.2	96.4
Plastic resins and materials	32.0	63.8	82.3	98.5	102.0	100.0	102.8	108.9	107.5	104.4	110.3
Rubber and plastic products ¹	44.9	62.2	80.5	90.1	96.4	100.0	100.8	102.3	101.9	101.9	103.0
Crude rubber	36.4	32.2	79.4	94.8	101.1	100.0	100.7	99.3	97.0	91.2	97.7
Tires and tubes	42.7	58.2	80.7	92.8	98.2	100.0	98.1	94.9	93.0	91.7	91.0
Miscellaneous rubber products	40.9	56.3	74.6	81.9	90.8	100.0	102.9	105.0	106.3	108.4	109.9
Plastic construction products	65.5	83.5	99.4	103.9	104.3	100.0	110.1	115.5	108.6	106.4	108.4
Laminated plastic sheets	(NA)	66.9	85.3	93.3	101.4	100.0	96.3	100.4	101.1	101.2	101.7
Lumber and wood products ¹	39.8	62.1	105.5	101.5	102.8	100.0	107.9	108.0	106.8	107.2	112.8
Lumber	55.6	61.9	114.0	104.9	104.6	100.0	113.5	112.5	109.6	110.5	118.2
Millwork	41.5	57.4	91.0	93.2	97.8	100.0	108.2	110.2	111.7	113.7	117.7
Plywood	46.7	69.4	107.9	106.2	105.9	100.0	105.2	104.1	99.6	101.4	102.6
Other wood products	49.7	68.5	99.7	101.2	101.2	100.0	97.6	99.3	100.1	100.9	103.7
Pulp, paper, and allied products ¹	37.5	59.0	75.9	86.3	94.8	100.0	103.3	110.3	113.3	116.1	121.8
Pulp, paper, and products, except building paper and board	39.7	62.9	80.6	91.7	99.1	100.0	99.3	107.3	106.9	107.6	114.3
Woodpulp	28.9	74.8	82.9	100.3	104.8	100.0	91.5	104.8	91.4	94.7	111.5
Wastepaper	103.2	90.9	170.5	172.2	145.0	100.0	(NA)	108.2	122.9	142.6	181.4
Paper	38.8	60.4	80.2	88.7	97.7	100.0	98.5	105.8	106.0	107.0	111.5
Paperboard	39.7	66.8	79.3	92.0	101.2	100.0	98.4	110.4	107.7	106.6	118.1
Converted paper and paperboard products	40.8	61.2	79.4	90.2	97.9	100.0	100.4	106.4	108.9	109.4	114.7
Building paper and board	42.2	53.1	76.2	88.1	96.7	100.0	104.4	108.2	107.4	108.8	111.2

See footnotes at end of table.

NO. 755. PRODUCER PRICE INDEXES, FOR SELECTED COMMODITIES: 1970 TO 1987—Continued

[1982=100. See headnote, p. 466]

COMMODITY GROUP	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
Metals and metal products ¹	38.7	61.5	86.0	95.0	99.6	100.0	101.8	104.8	104.4	103.2	107.1
Iron and steel.....	34.0	59.3	83.6	90.0	98.5	100.0	101.3	105.3	104.8	101.1	104.6
Steel mill products.....	32.7	56.4	80.2	88.6	96.6	100.0	100.9	104.7	104.7	99.8	102.3
Nonferrous metals.....	47.3	65.1	99.3	115.7	108.4	100.0	104.7	105.1	98.6	98.5	108.8
Metal containers.....	34.3	58.5	81.9	90.9	96.1	100.0	102.1	106.5	108.0	110.2	109.5
Hardware	39.8	58.2	78.0	85.8	95.9	100.0	103.7	105.8	109.1	109.5	109.6
Plumbing fixtures, brass fittings.....	39.9	58.2	77.9	88.5	96.0	100.0	103.8	108.9	111.9	115.5	119.7
Heating equipment.....	46.6	63.5	78.9	87.0	94.5	100.0	102.7	106.4	109.5	113.0	115.5
Fabricated structural metal products.....	36.7	62.0	81.6	88.8	96.9	100.0	99.6	101.9	103.2	103.6	105.4
Miscellaneous metal products.....	40.5	64.1	81.9	88.5	95.8	100.0	100.5	104.6	107.1	107.0	107.8
Machinery and equipment ¹	40.0	57.9	76.7	86.0	94.4	100.0	102.7	105.1	107.2	108.8	110.4
Agricultural.....	36.4	54.2	74.6	83.3	92.7	100.0	104.9	108.0	108.7	109.2	109.6
Construction.....	32.7	52.8	74.5	84.2	93.3	100.0	102.3	103.8	105.4	108.7	108.9
Metalworking.....	35.6	53.5	75.2	85.5	93.9	100.0	101.7	104.1	106.6	108.4	110.1
General purpose.....	37.4	56.7	77.8	87.0	95.0	100.0	101.4	103.3	105.7	107.2	108.3
Special industry.....	35.6	53.8	76.0	84.8	94.7	100.0	103.7	107.3	110.8	114.2	117.3
Electrical.....	45.9	60.7	77.2	87.1	95.1	100.0	103.7	107.4	109.8	111.2	112.6
Miscellaneous.....	42.0	60.5	77.8	85.7	94.1	100.0	102.1	102.2	103.8	104.2	105.7
Furniture and household durables ¹	51.9	67.5	82.8	90.7	95.9	100.0	103.4	105.7	107.1	108.2	109.9
Household furniture.....	48.6	63.6	81.0	89.1	95.4	100.0	102.1	105.3	108.5	110.3	113.0
Commercial furniture.....	41.6	60.5	80.5	85.7	93.5	100.0	103.9	107.8	111.9	115.3	118.6
Floor coverings.....	54.9	69.0	81.7	90.0	98.7	100.0	102.4	105.6	105.6	108.9	110.7
Household appliances.....	52.9	66.5	80.8	87.5	94.5	100.0	103.9	106.0	106.7	105.7	105.6
Home electronic equipment.....	106.0	106.2	103.7	103.8	101.3	100.0	97.8	95.2	90.8	89.9	88.8
Nonmetallic mineral products ¹	35.3	54.4	77.6	88.4	96.7	100.0	101.6	105.4	106.6	110.0	110.0
Flat glass.....	52.2	62.8	83.0	88.7	96.0	100.0	103.7	104.1	101.7	104.5	107.2
Concrete ingredients.....	36.3	55.6	78.7	88.4	95.6	100.0	101.1	105.1	108.5	109.4	110.4
Concrete products.....	37.7	57.3	82.0	92.0	97.8	100.0	101.4	103.9	107.3	109.2	109.4
Clay construction products, exc. refractories.....	42.1	68.0	83.6	88.6	95.8	100.0	106.5	110.0	113.5	118.0	121.4
Refractories.....	35.9	49.2	70.2	78.5	89.7	100.0	101.2	107.1	109.7	110.2	110.5
Asphalt felt and coatings.....	25.8	56.7	81.7	99.6	102.3	100.0	96.4	100.3	102.6	97.9	92.4
Gypsum products.....	38.9	56.2	98.5	100.1	100.1	100.0	111.7	135.4	132.3	137.0	125.2
Glass containers.....	33.9	50.5	73.4	82.3	92.5	100.0	99.1	101.4	106.8	111.9	113.0
Transportation equipment ¹	41.9	56.7	75.3	82.9	94.3	100.0	102.8	105.2	107.9	110.5	112.5
Motor vehicles and equipment.....	43.3	57.6	75.8	83.1	94.6	100.0	102.2	104.1	106.4	109.1	111.7
Motor vehicles.....	47.2	60.6	80.0	87.1	95.4	100.0	102.4	104.7	107.8	111.4	113.8
Railroad equipment.....	33.2	58.1	80.0	90.4	97.0	100.0	101.1	102.8	104.9	105.4	104.7
Miscellaneous products ¹	39.8	53.4	75.5	93.6	98.1	100.0	104.8	107.0	109.4	111.6	114.9
Toys, sporting goods, small arms, etc.....	49.5	69.5	79.6	89.7	95.7	100.0	103.7	102.6	104.5	106.8	107.8
Tobacco products.....	35.2	46.3	67.4	76.0	83.1	100.0	113.1	123.9	132.5	142.5	154.7
Notions.....	39.1	54.5	69.3	78.4	93.8	100.0	101.1	102.3	102.9	103.7	105.2
Photographic equipment and supplies.....	49.8	62.1	73.0	96.4	99.8	100.0	102.5	102.0	102.6	104.0	105.4

NA Not available. ¹ Includes other product groups, not shown separately.Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly and annual.

No. 756. PRODUCER PRICE INDEXES—AVERAGE ANNUAL PERCENT CHANGE IN SELECTED MAJOR COMMODITY GROUPS: 1970 TO 1987

[Minus sign (-) indicates decrease]

COMMODITY GROUP	1970-75	1975-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87
All commodities	8.9	9.0	9.1	2.0	1.3	2.4	-.5	2.9	2.6
Farm products.....	11.0	6.0	2.2	-4.9	2.4	3.0	-9.9	-2.3	2.8
Processed foods, feeds.....	10.2	5.7	3.1	-1.1	1.8	3.5	-1.8	1.8	2.4
Textile products, apparel.....	5.2	5.9	8.8	2.5	.3	2.4	-.2	.3	1.8
Hides, skins, leather, related products.....	6.1	10.9	4.9	.7	3.2	5.6	-.1	3.8	6.5
Fuels, related products, power.....	18.3	18.5	21.0	-.2	-4.1	-1.1	-3.6	-23.6	.6
Chemicals and allied products.....	12.1	7.5	10.6	1.6	-.3	2.6	-.8	-1.1	3.7
Rubber and plastic products.....	6.7	7.7	7.0	3.7	.8	1.5	-.4	-.1	1.1
Lumber and wood products.....	9.3	10.3	1.3	-2.7	7.9	.1	-1.3	.6	5.2
Pulp, paper, and allied products.....	9.5	7.9	9.8	5.5	3.3	6.8	2.7	2.5	4.9
Metals and metal products.....	9.7	9.1	4.8	.4	1.8	2.9	-.4	-1.1	3.8
Machinery and equipment.....	7.7	8.2	9.8	5.9	2.7	2.3	2.0	1.5	1.5
Furniture and household durables.....	5.4	6.1	5.7	4.3	3.4	2.2	1.3	1.0	1.6
Nonmetallic mineral products.....	9.0	10.2	9.4	3.4	1.6	3.7	3.0	1.3	-
Transportation equipment.....	6.2	7.9	13.8	6.0	2.8	2.3	2.6	2.4	1.8

- Represents zero.

Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly and annual.

NO. 757. PRODUCER PRICE INDEXES FOR THE NET OUTPUT OF SELECTED INDUSTRIES: 1980 TO 1987

[Indexes are based on selling prices reported by establishments of all sizes selected by probability sampling. See text, section 27.]

SIC code ¹	ITEM	Unit	1980	1983	1984	1985	1986	1987
2022	Natural and processed cheese.....	June 1981=100..	94.6	101.5	101.5	98.6	98.6	97.5
2024	Ice cream and frozen desserts.....	June 1983=100..	89.0	100.3	103.2	104.3	105.5	109.5
2083	Malt and malt byproducts.....	June 1985=100..	114.4	107.1	110.0	100.9	98.0	88.6
2085	Distilled liquor, except brandy.....	June 1983=100..	85.6	99.3	100.2	101.5	104.4	105.9
2092	Fresh or frozen packaged fish.....	Dec. 1982=100..	78.8	102.4	102.7	101.4	110.2	120.6
2095	Coffee.....	June 1981=100..	112.9	104.4	110.4	111.5	141.2	118.1
2111	Cigarettes.....	Dec. 1982=100..	62.5	93.5	102.3	110.7	120.9	133.4
2121	Cigars.....	Dec. 1982=100..	88.2	99.8	104.4	110.3	111.5	116.0
2311	Men's and boys' suits and coats.....	Dec. 1980=100..	98.4	113.2	116.8	119.9	121.6	125.2
2323	Men's and boys' neckwear.....	Dec. 1983=100..	91.2	99.0	103.2	103.8	105.1	107.3
2327	Men's and boys' separate trousers.....	Dec. 1981=100..	93.7	103.3	104.6	103.7	108.8	109.2
2335	Women's, misses', and juniors' dresses.....	Dec. 1980=100..	98.6	107.3	107.2	108.0	110.1	113.0
2342	Brassieres and allied garments.....	June 1982=100..	85.4	104.2	109.0	114.2	117.1	119.6
2436	Softwood plywood.....	Dec. 1980=100..	91.4	94.3	91.6	90.0	91.5	93.8
2451	Mobile homes.....	June 1981=100..	96.3	105.3	105.2	106.1	107.1	108.7
2492	Particleboard.....	Dec. 1982=100..	91.6	106.1	116.3	110.0	111.8	120.3
2512	Upholstered wood household furniture.....	June 1982=100..	89.7	102.3	104.2	107.9	109.3	111.6
2521	Wood office furniture.....	June 1985=100..	77.6	92.7	95.8	100.1	103.1	105.8
2647	Sanitary paper products.....	June 1983=100..	91.4	100.7	102.4	105.6	106.3	107.5
2711	Newspaper publishing.....	Dec. 1979=100..	106.8	143.8	153.8	164.0	172.3	181.6
2721	Periodical publishing.....	Dec. 1979=100..	105.5	137.9	147.8	157.9	167.0	173.8
2892	Explosives.....	Dec. 1980=100..	95.4	116.3	118.9	121.6	126.2	131.7
2911	Petroleum refining.....	June 1985=100..	104.6	106.8	102.7	98.3	64.0	67.9
3011	Tires and inner tubes.....	June 1981=100..	93.9	98.9	98.2	96.8	95.6	95.1
3021	Rubber and plastic footwear.....	Dec. 1980=100..	97.6	101.5	103.7	99.9	108.6	111.7
3143	Men's footwear.....	Dec. 1980=100..	98.4	108.3	109.9	111.9	115.0	119.2
3144	Women's footwear.....	Dec. 1980=100..	98.3	103.6	102.9	104.3	104.7	106.4
3251	Brick and structural clay tile.....	Dec. 1984=100..	79.6	95.4	99.0	101.4	105.1	108.1
3253	Ceramic wall and floor tile.....	June 1985=100..	74.8	89.2	92.3	97.3	101.7	104.7
3271	Concrete block and brick.....	June 1981=100..	94.9	103.3	107.3	112.6	117.2	118.7
3272	Concrete products.....	Dec. 1979=100..	104.8	115.9	117.4	121.4	123.3	123.9
3273	Ready-mixed concrete.....	June 1981=100..	92.7	102.3	105.1	108.6	109.5	109.2
3274	Lime.....	Dec. 1985=100..	86.2	101.5	99.9	101.1	100.5	101.9
3275	Gypsum products.....	June 1981=100..	98.4	108.3	130.3	127.1	130.9	120.6
3334	Primary aluminum.....	June 1980=100..	102.6	110.6	113.2	107.1	107.1	116.1
3425	Hand saws and saw blades.....	June 1983=100..	80.5	100.0	101.5	104.0	106.1	109.4
3431	Metal sanitary ware.....	Dec. 1980=100..	97.8	112.1	118.0	122.4	122.7	123.4
3442	Metal doors, sash and trim.....	June 1983=100..	86.0	100.6	104.3	104.8	106.7	109.4
3482	Small arms ammunition, 30mm and under.....	June 1985=100..	73.2	90.8	95.7	101.8	104.1	100.9
3523	Farm machinery and equipment.....	Dec. 1982=100..	80.8	101.6	104.8	105.3	105.6	106.0
3531	Construction machinery.....	Dec. 1980=100..	95.7	114.4	116.7	119.5	120.8	122.6
3594	Elevators and moving stairways.....	June 1981=100..	95.3	108.1	108.5	109.4	110.8	111.8
3541	Machine tools, metal cutting types.....	June 1983=100..	83.1	99.9	102.3	105.0	107.3	109.8
3542	Metal forming machine tools.....	June 1981=100..	91.4	110.5	112.8	115.2	117.1	118.5
3552	Textile machinery.....	Dec. 1980=100..	95.8	118.8	123.5	127.0	132.0	135.8
3553	Woodworking machinery.....	Dec. 1980=100..	95.9	104.8	104.2	108.8	110.4	112.9
3585	Refrigeration and heating equipment.....	Dec. 1982=100..	88.3	101.4	102.8	104.7	105.9	106.7
3612	Transformers.....	June 1981=100..	88.2	108.7	109.5	111.5	111.7	113.5
3621	Electric motors and generators.....	June 1983=100..	82.6	101.5	104.8	108.2	109.1	110.8
3635	Household vacuum cleaners.....	Dec. 1982=100..	94.1	101.9	104.2	106.8	107.1	106.0
3636	Sewing machines.....	Dec. 1983=100..	82.4	99.6	100.5	101.2	104.6	108.7
3671	Electron tubes, all types.....	Dec. 1985=100..	44.3	76.8	87.4	96.5	100.2	99.9
3674	Semiconductors and related devices.....	June 1981=100..	100.5	100.6	107.4	106.6	108.1	108.2
3675	Electronic capacitors.....	June 1981=100..	95.0	95.5	94.3	93.8	91.7	91.8
3676	Resistors for electronic applications.....	Dec. 1980=100..	97.3	107.7	108.6	114.0	116.6	118.4
3678	Connectors for electronic applications.....	Dec. 1980=100..	98.9	109.0	114.2	118.2	122.3	124.7
3691	Storage batteries.....	Dec. 1984=100..	109.2	101.3	99.3	98.7	99.5	106.6
3711	Motor vehicles and passenger car bodies.....	June 1982=100..	86.0	102.1	104.6	107.2	111.0	113.0
3822	Environmental controls.....	Dec. 1979=100..	108.6	133.4	134.9	139.5	143.9	146.3
3911	Jewelry, precious metal.....	Dec. 1985=100..	122.1	107.9	102.7	100.4	103.0	110.5
3931	Musical instruments.....	June 1985=100..	88.3	101.5	103.4	101.5	103.5	106.4
3942	Dolls.....	Dec. 1985=100..	94.4	101.9	99.7	100.0	100.4	96.4
3985	Burial caskets.....	Dec. 1984=100..	82.8	96.8	99.8	102.0	104.8	108.0
3996	Hard surface floor coverings.....	Dec. 1985=100..	81.8	92.0	95.4	99.0	101.7	104.2

¹ Standard Industrial Classification code.Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly.

Consumer Price Indexes

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NO. 758. CONSUMER PRICE INDEXES, BY MAJOR GROUPS: 1960 TO 1987

[1982-84=100. Represents annual averages of monthly figures. Reflects buying patterns of all urban consumers. See text. See *Historical Statistics, Colonial Times to 1970*, series E 135-173 for similar data]

YEAR	All items	Energy	Food	Shelter	Apparel and upkeep	Transportation	Medical care	Fuel oil	Electricity	Utility (piped) gas	Telephone services	All commodities
1960.....	29.6	22.4	30.0	25.2	45.7	29.8	22.3	13.5	29.9	17.8	58.3	33.6
1961.....	29.9	22.5	30.4	25.4	46.1	30.1	22.9	14.0	29.8	17.9	58.5	33.8
1962.....	30.2	22.6	30.6	25.8	46.3	30.8	23.5	14.0	29.9	17.9	58.5	34.1
1963.....	30.8	22.6	31.1	26.1	46.9	30.9	24.1	14.3	29.9	17.9	58.6	34.4
1964.....	31.0	22.5	31.5	26.5	47.3	31.4	24.6	14.0	29.8	17.9	58.6	34.8
1965.....	31.5	22.9	32.2	27.0	47.8	31.9	25.2	14.3	29.7	18.0	57.7	35.2
1966.....	32.4	23.3	33.8	27.8	49.0	32.3	26.3	14.7	29.7	18.1	56.5	35.1
1967.....	33.4	23.8	34.1	28.8	51.0	33.3	28.2	15.1	29.9	18.1	57.3	36.8
1968.....	34.8	24.2	35.3	30.1	53.7	34.3	29.9	15.6	30.2	18.2	57.3	36.1
1969.....	36.7	24.8	37.1	32.6	56.8	35.7	31.9	15.9	30.8	18.5	58.0	39.9
1970.....	38.8	25.5	39.2	35.5	59.2	37.5	34.0	16.5	31.8	19.6	58.7	41.7
1971.....	40.5	26.5	40.4	37.0	61.1	39.5	36.1	17.6	33.9	21.0	61.6	43.2
1972.....	41.8	27.2	42.1	38.7	62.3	39.9	37.3	17.6	35.6	22.1	65.0	44.5
1973.....	44.4	29.4	48.2	40.5	64.6	41.2	38.8	20.4	37.4	23.1	66.7	47.8
1974.....	49.3	36.1	55.1	44.4	69.4	45.8	42.4	32.2	44.1	26.0	69.5	53.5
1975.....	53.8	42.1	59.8	48.8	72.5	50.1	47.5	34.9	50.0	31.1	71.7	58.2
1976.....	56.9	45.1	61.6	51.5	75.2	55.1	52.0	37.4	53.1	36.3	74.3	60.7
1977.....	60.6	49.4	65.5	54.9	78.6	59.0	57.0	42.4	56.6	43.2	75.2	64.2
1978.....	65.2	52.5	72.0	60.5	81.4	61.7	61.8	44.9	60.9	47.5	76.0	68.6
1979.....	72.6	65.7	79.9	68.9	84.9	70.5	67.5	63.1	65.6	55.1	75.8	76.6
1980.....	82.4	86.0	86.8	81.0	90.9	83.1	74.9	87.7	75.8	65.7	77.7	86.0
1981.....	90.9	97.7	83.6	90.5	95.3	93.2	82.9	107.3	87.2	74.9	84.6	93.2
1982.....	96.5	99.2	97.4	96.9	97.8	97.0	92.5	105.0	95.8	88.8	93.2	97.0
1983.....	99.6	99.9	99.4	99.1	100.2	99.3	100.6	96.5	98.9	104.7	99.2	99.8
1984.....	103.9	100.9	103.2	104.0	102.1	103.7	106.8	98.5	105.3	105.5	107.5	103.2
1985.....	107.6	101.6	105.6	109.8	105.0	106.4	113.5	94.6	108.9	104.8	111.7	105.4
1986.....	109.6	108.2	109.0	113.5	105.9	102.3	122.0	74.1	110.4	99.7	117.2	104.4
1987.....	113.6	108.6	113.5	121.3	110.6	105.4	130.1	75.8	110.0	95.1	116.5	107.7

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review* and *Handbook of Labor Statistics*, periodic.

NO. 759. CONSUMER PRICE INDEXES—ANNUAL PERCENT CHANGE IN MAJOR GROUPS: 1975 TO 1987

[See headnote, table 758. See also table 760 for base data. Minus sign (-) indicates decrease]

ITEM	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
All items.....	9.1	5.8	6.5	7.6	11.3	13.5	10.3	6.2	3.2	4.3	3.6	1.9	3.6
Food.....	8.5	3.0	6.3	9.9	11.0	8.6	7.8	4.1	2.1	3.8	2.3	3.2	4.1
Housing.....	10.7	6.1	6.7	8.7	12.3	15.7	11.5	7.2	2.7	4.1	4.0	3.0	3.0
Shelter.....	9.9	5.5	6.6	10.2	13.9	17.6	11.7	7.1	2.3	4.9	5.6	5.5	4.7
Household fuels and other utilities....	11.5	8.8	10.7	6.9	10.8	16.4	14.6	9.8	5.6	4.6	1.6	-2.3	-1.1
Household fuels.....	14.5	9.9	13.2	8.2	15.7	22.0	16.6	9.6	5.1	3.5	.5	-5.1	-1.9
Household furnishings and operations.....	11.6	6.2	4.6	6.1	7.0	8.0	7.8	5.4	2.2	1.7	1.9	1.3	1.8
House furnishings.....	9.4	4.0	3.3	4.5	5.7	6.8	6.3	4.7	1.9	.8	.5	.5	1.4
Appliances and electronic equipment.....	7.9	4.2	2.2	3.6	4.0	3.4	4.1	3.3	.2	-1.9	-3.6	-2.5	-1.5
Apparel and upkeep.....	4.5	3.7	4.5	3.6	4.3	7.1	4.8	2.6	2.5	1.9	2.8	.9	4.4
Transportation.....	9.4	10.0	7.1	4.6	14.3	17.8	12.2	4.1	2.4	4.4	2.6	-3.9	3.0
Private transportation.....	9.5	9.9	7.4	4.7	14.7	17.4	11.4	3.5	2.3	4.3	2.5	-4.7	3.0
Medical care.....	12.0	9.5	9.6	8.4	9.2	11.0	10.7	11.6	8.8	6.2	6.3	7.5	6.6
Medical care services.....	12.6	10.1	9.9	8.5	9.8	11.3	10.7	11.8	8.7	6.0	6.1	7.7	6.6
Entertainment.....	9.0	5.0	4.9	5.3	6.7	9.0	7.8	6.5	4.3	3.7	3.9	3.4	3.3
Entertainment commodities.....	10.8	5.5	5.2	5.3	6.5	10.0	8.2	6.1	3.3	2.6	2.9	2.0	2.4
Personal care.....	9.7	6.6	6.5	6.4	7.6	8.9	8.8	7.1	5.1	4.0	3.8	3.3	2.9
Personal and educational expenses.....	7.3	6.6	6.4	7.6	7.9	10.6	12.4	13.3	10.7	9.7	8.6	8.0	7.7
Fuel oil and other household fuel commodities.....	9.6	6.6	13.1	5.2	35.1	38.0	21.5	-1.1	-6.0	2.3	-3.5	-19.1	.4
Gas (piped) and electricity.....	16.2	11.5	13.0	8.9	10.9	17.0	14.7	13.8	8.9	3.8	1.6	-1.3	-1.8
All commodities.....	8.8	4.3	5.8	7.2	11.3	12.3	8.4	4.1	2.9	3.4	2.1	-9	3.2

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review*.

No. 760. CONSUMER PRICE INDEXES FOR SELECTED ITEMS AND GROUPS: 1970 TO 1987

[1982-84=100. Annual averages of monthly figures. See headnote, table 758]

ITEM	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
All items	38.8	53.8	72.6	82.4	90.9	96.5	99.6	103.9	107.6	109.6	113.6
Food and beverages											
Food	40.1	60.2	79.9	86.7	93.5	97.3	99.5	103.2	105.6	109.1	113.5
Food at home	39.2	59.8	79.9	86.8	93.6	97.4	99.4	103.2	105.6	109.0	113.5
Cereals and bakery products	39.9	61.8	81.8	88.4	94.8	96.1	99.1	102.8	104.3	107.3	111.9
Meats, poultry, fish and eggs	37.1	62.9	74.9	83.9	92.3	96.5	99.6	103.1	107.9	110.9	114.8
Fish and seafood	31.3	53.9	80.1	87.5	94.8	98.2	99.3	102.5	107.5	117.4	129.9
Eggs	65.6	82.4	90.2	88.8	95.9	93.3	97.7	109.1	91.0	97.2	91.5
Dairy products	44.7	62.6	82.8	90.9	97.4	98.8	100.0	101.3	103.2	103.3	105.9
Fruits and vegetables	37.8	56.9	76.6	82.1	92.0	97.0	97.3	105.7	108.4	109.4	119.1
Apples	37.1	56.4	79.1	92.1	84.3	98.8	94.6	106.8	113.1	130.6	131.0
Coffee	31.7	46.4	101.8	111.6	96.2	98.5	98.8	102.7	105.5	132.7	116.2
Alcoholic beverages	52.1	65.9	79.9	86.4	92.5	96.7	100.4	103.0	106.4	111.1	114.1
Alcoholic beverages at home	(NA)	(NA)	90.6	87.3	93.1	97.0	100.6	102.4	105.2	109.3	111.5
Beer and ale at home	49.2	63.4	76.9	84.8	90.9	95.2	100.7	104.2	106.7	108.7	110.9
Distilled spirits at home	(NA)	(NA)	85.1	89.4	94.9	98.2	100.4	101.4	105.3	113.3	114.4
Wine at home	49.7	65.5	82.4	89.5	96.2	100.4	100.5	99.1	100.2	102.4	105.7
Alcoholic beverages away from home	(NA)	(NA)	77.2	82.8	90.1	95.2	99.8	105.1	111.1	118.5	123.4
Lunch away from home	(NA)	(NA)	76.4	83.8	91.4	96.2	100.0	103.8	107.8	112.0	116.6
Dinner away from home	(NA)	(NA)	76.6	84.2	91.4	95.9	99.7	104.4	108.8	112.7	117.0
Housing	36.4	50.7	70.1	81.1	90.4	96.9	99.5	103.6	107.7	110.9	114.2
Shelter	35.5	48.8	68.9	81.0	90.5	96.9	99.1	104.0	109.8	115.8	121.3
Renters' cost	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	103.0	108.6	115.4	121.9	128.1
Tenants' insurance	(NA)	(NA)	71.1	78.9	86.6	94.4	100.7	104.8	109.4	115.8	120.4
Homeowners' costs	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	102.5	107.3	113.1	119.4	124.8
Owners' equivalent rent	(NA)	(NA)	-	-	-	-	102.5	107.3	113.2	119.4	124.8
Household insurance	(NA)	(NA)	-	-	-	-	103.2	107.5	112.4	119.2	124.0
Maintenance and repair	35.8	54.1	74.0	82.4	90.7	96.4	99.9	103.7	106.5	107.9	111.8
Maintenance and repair services	33.1	51.3	71.7	80.0	88.5	94.6	99.7	105.7	108.7	111.2	114.8
Household fuels and other utilities	29.1	45.4	64.8	75.4	86.4	94.9	100.2	104.8	106.5	104.1	103.0
Household fuels	23.1	39.4	61.3	74.8	87.2	95.6	100.5	104.0	104.5	99.2	97.3
Fuel oil and other household fuel commodities	17.0	36.4	62.4	86.1	104.6	103.4	97.2	99.4	95.9	77.6	77.9
Fuel oil	16.5	34.9	63.1	87.7	107.3	105.0	96.5	98.5	94.6	74.1	75.8
Gas (piped) and electricity	25.4	40.1	61.0	71.4	81.9	93.2	101.5	105.4	107.1	105.7	103.8
Electricity	31.8	50.0	65.6	75.8	87.2	95.8	99.9	105.3	108.9	110.4	110.0
Utility (piped) gas	19.6	31.1	55.1	65.7	74.9	89.8	104.7	105.5	104.8	99.7	95.1
Telephone services	58.7	71.7	75.8	77.7	84.6	93.2	99.2	107.5	111.7	117.2	116.5
Household furnishings and operations	46.8	63.4	79.9	86.3	93.0	98.0	100.2	101.9	103.8	105.2	107.1
Housefurnishings	55.5	69.8	82.9	88.5	94.1	98.5	100.4	101.2	101.7	102.2	103.6
Appliances and electronic equipment	69.3	78.8	90.4	93.5	97.3	100.5	100.7	98.8	95.2	92.8	91.4
TV and sound equipment	(NA)	(NA)	99.8	100.7	102.9	102.9	100.4	96.7	91.9	88.0	86.0
Apparel and upkeep	59.2	72.5	84.9	90.9	95.3	97.8	100.2	102.1	105.0	105.9	110.6
Apparel commodities	63.3	76.7	87.5	92.9	96.5	98.3	100.2	101.5	104.0	104.2	108.9
Apparel commodities less footwear	64.5	78.0	87.9	93.0	96.5	98.1	100.2	101.6	104.3	104.7	108.6
Men's and boy's apparel	62.2	75.5	85.4	89.4	94.2	97.6	100.3	102.1	105.0	106.2	108.1
Women's and girl's apparel	71.8	85.5	94.0	96.0	97.5	98.5	100.2	101.3	104.9	104.0	110.4
Transportation	37.5	50.1	70.5	83.1	93.2	97.0	99.3	103.7	106.4	102.3	105.4
Private transportation	37.5	50.6	71.7	84.2	93.8	97.1	99.3	103.6	106.2	101.2	104.2
Automobile maintenance and repair	36.6	53.7	73.7	81.5	88.2	96.0	100.3	103.8	106.1	110.3	114.8
Automobile insurance	42.0	48.4	75.8	82.0	85.9	91.4	100.4	108.2	119.2	135.0	146.2
Automobile finance charges	(NA)	(NA)	68.7	86.4	103.2	110.0	92.9	97.1	94.5	86.0	84.9
Vehicle rental, registration, other	(NA)	(NA)	74.1	78.3	82.4	93.6	100.2	106.3	111.7	117.2	123.0
Airline fare	28.3	38.0	49.2	68.0	85.6	94.4	99.8	105.8	112.5	117.1	122.8
Medical care	34.0	47.5	87.5	74.9	82.9	92.5	100.6	106.8	113.5	122.0	130.1
Prescription drugs	47.4	51.2	66.4	72.5	80.8	90.2	100.1	109.7	120.1	130.4	140.8
Nonprescription drugs, medical supplies	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	103.1
Medical care services	32.3	46.6	67.2	74.8	82.6	92.6	100.7	106.7	113.2	121.9	130.0
Professional medical services	37.0	50.8	70.1	77.9	85.9	93.2	99.8	107.0	113.5	120.8	128.8
Hospital and related services	(NA)	(NA)	61.0	69.2	79.1	90.3	100.5	109.2	116.1	123.1	131.6
Entertainment	47.5	62.0	76.7	83.6	90.1	96.0	100.1	103.8	107.9	111.6	115.3
Entertainment commodities	46.1	61.7	76.8	84.5	91.4	97.0	100.2	102.8	105.8	107.9	110.5
Reading materials	(NA)	(NA)	70.0	77.7	85.9	94.3	101.2	104.5	110.7	115.6	119.5
Sporting goods, equipment	(NA)	(NA)	81.0	88.5	94.4	98.2	99.4	102.4	104.6	104.0	104.3
Personal care	43.5	57.9	75.2	81.9	89.1	95.4	100.3	104.3	108.3	111.9	115.1
Personal and educational expenses	35.5	46.7	64.1	70.9	79.7	90.3	100.0	109.7	119.1	128.6	138.5
All commodities	41.7	58.2	76.6	86.0	93.2	97.0	99.8	103.2	105.4	104.4	107.7
All commodities less food	43.4	57.6	75.3	85.7	93.1	96.9	100.0	103.1	105.2	101.7	104.3
Durables	44.1	57.4	75.4	83.0	89.6	95.1	99.8	105.1	106.8	106.6	108.2
Nondurables	40.8	59.3	77.2	87.6	95.2	97.8	99.7	102.5	104.8	103.5	107.5
Energy	25.5	42.1	65.7	86.0	97.7	99.2	99.9	100.9	101.6	88.2	86.6

- Represents zero. NA Not available.

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review* and *CPI Detailed Report*, January issues.

No. 761. CONSUMER PRICE INDEXES—SELECTED AREAS: 1970 TO 1987

[1982-84=100. Represents annual averages of monthly figures. Local area CPI indexes are byproducts of the national CPI program. Each local index has a smaller sample size than the national index and is therefore subject to substantially more sampling and other measurement error. As a result, local area indexes show greater volatility than the national index, although their long-term trends are similar. Area definitions are those established by the Office of Management and Budget in 1983. For further detail see the U.S. Bureau of Labor Statistics Handbook of Methods, Bulletin 2285, Chapter 19, the Consumer Price Index, and Report 736, the CPI: 1987 Revision. See also text, section 15.]

AREA	1970	1975	1980	1982	1983	1984	1985	1986	1987
All Item Index.....	38.8	53.8	82.4	86.5	99.6	103.9	107.6	109.6	113.6
Anchorage, AK MSA.....	41.1	57.1	85.5	92.4	99.2	103.3	106.8	107.8	108.2
Atlanta, GA MSA.....	38.6	53.6	80.3	96.0	99.9	104.1	106.0	112.2	116.5
Baltimore, MD MSA.....	39.1	55.2	83.7	95.6	99.9	104.5	108.2	110.9	114.2
Boston-Lawrence-Salem, MA-NH CMSA.....	40.2	55.8	82.6	95.5	98.8	104.7	108.4	112.2	117.1
Buffalo-Niagara Falls, NY CMSA.....	41.2	57.4	83.5	94.7	100.9	104.4	108.6	109.8	113.0
Chicago-Gary-Lake County, IL-IN-WI CMSA.....	38.9	52.8	82.5	96.2	100.0	103.8	107.7	110.0	114.5
Cincinnati-Hamilton, OH-KY-IN CMSA.....	37.4	51.8	82.1	94.9	100.8	104.3	106.5	107.6	111.9
Cleveland-Akron-Lorain, OH CMSA.....	37.2	50.2	78.9	94.0	101.2	104.8	107.8	109.4	112.7
Dallas-Fort Worth, TX CMSA.....	37.6	50.4	81.5	98.0	99.7	104.3	108.2	109.9	112.9
Denver-Boulder, CO CMSA.....	34.5	48.4	78.4	95.1	100.5	104.3	107.1	107.9	110.8
Detroit-Ann Arbor, MI CMSA.....	39.5	53.9	85.3	97.0	99.8	103.2	106.8	108.3	111.7
Honolulu, HI MSA.....	41.5	56.3	83.0	97.2	98.3	103.5	106.8	109.4	114.9
Houston-Galveston-Brazoria, TX CMSA.....	36.4	51.4	82.7	97.3	100.0	102.7	104.9	103.9	108.7
Kansas City, MO-KS CMSA.....	39.0	53.2	83.6	95.0	100.5	104.5	107.7	108.7	113.1
Los Angeles-Anaheim-Riverside, CA CMSA.....	38.7	53.3	83.7	97.3	99.1	103.6	108.4	111.9	116.7
Miami-Fort Lauderdale, FL CMSA.....	(NA)	(NA)	81.1	96.7	99.9	103.5	106.5	107.9	111.8
Milwaukee, WI PMSA.....	37.5	50.8	81.4	95.9	100.2	103.8	107.0	107.4	111.5
Minneapolis-St. Paul, MN-WI MSA.....	37.4	51.2	78.9	97.4	99.5	103.1	107.0	106.4	111.6
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA.....	41.2	57.6	82.1	95.3	99.8	104.8	108.7	112.3	118.0
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA.....	40.8	56.8	83.6	96.6	99.4	104.1	108.8	111.5	116.8
Pittsburgh-Beaver Valley, PA CMSA.....	38.1	52.4	81.0	94.4	101.1	104.5	106.9	108.2	111.4
Portland-Vancouver, OR-WA CMSA.....	38.7	53.5	87.2	98.0	99.1	102.8	106.7	108.2	110.9
San Diego, CA MSA.....	34.1	47.6	79.4	96.2	99.0	104.8	110.4	113.5	117.5
San Francisco-Oakland-San Jose, CA CMSA.....	37.7	51.8	80.4	97.6	98.4	104.0	108.4	111.6	115.4
Seattle-Tacoma, WA CMSA.....	37.4	51.1	82.7	97.7	99.3	103.0	105.6	106.7	109.2
St. Louis-East St. Louis, MO-IL CMSA.....	38.8	52.6	82.5	96.6	100.1	103.3	107.1	108.6	112.2
Washington, DC-MD-VA MSA.....	39.8	54.7	82.9	95.5	99.8	104.6	109.0	112.2	116.2
1987									
	All items	Food and beverages	Food	Housing	Apparel and upkeep	Transportation	Medical care	Entertainment	Fuel and other utilities
Index	113.6	113.5	113.5	114.2	110.6	105.4	130.1	115.3	103.0
Baltimore, MD MSA.....	114.2	116.8	117.1	112.6	119.7	106.9	127.9	118.9	94.0
Boston-Lawrence-Salem, MA-NH CMSA.....	117.1	119.4	119.2	116.8	115.8	103.3	139.2	119.4	88.9
Chicago-Gary-Lake County, IL-IN-WI CMSA.....	114.5	113.2	113.1	116.3	109.2	106.1	129.2	116.0	104.3
Cleveland-Akron-Lorain, OH CMSA.....	112.7	111.3	111.3	114.0	108.5	103.9	128.5	115.8	102.6
Dallas-Fort Worth, TX CMSA.....	112.9	115.9	116.1	109.5	114.5	103.5	134.2	122.0	100.6
Detroit-Ann Arbor, MI CMSA.....	111.7	110.5	110.3	113.0	108.0	105.3	132.9	112.1	108.8
Houston-Galveston-Brazoria, TX CMSA.....	106.5	111.8	112.1	97.0	113.6	102.5	130.4	118.5	94.2
Los Angeles-Anaheim-Riverside, CA CMSA.....	116.7	113.2	112.8	121.0	112.5	108.9	129.5	111.2	112.6
Miami-Fort Lauderdale, FL CMSA.....	111.8	113.0	113.5	108.7	115.8	106.6	128.6	113.7	109.8
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA.....	118.0	118.6	118.6	118.0	109.9	108.7	136.1	119.2	94.1
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA.....	116.8	112.1	112.0	118.4	107.7	111.5	138.0	112.2	100.8
Pittsburgh-Beaver Valley, PA CMSA.....	111.4	109.4	109.3	113.4	107.0	100.5	190.2	121.4	108.4
St. Louis-East St. Louis, MO-IL CMSA.....	112.2	114.0	114.1	112.1	107.6	103.9	127.9	113.9	109.4
San Francisco-Oakland-San Jose, CA CMSA.....	115.4	113.7	114.0	121.5	104.6	102.4	126.7	121.6	105.4
Washington, DC-MD-VA MSA.....	116.2	113.6	113.6	118.9	116.3	105.9	129.1	121.5	101.0

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review*, and *CPI Detailed Report*, January issues.

**No. 762. ANNUAL PERCENT CHANGES IN CONSUMER PRICES, UNITED STATES AND OECD COUNTRIES:
1970 TO 1987**

[Covers member countries of Organization for Economic Cooperation and Development (OECD). For consumer price indexes for OECD countries, see section 31.]

COUNTRY	1970	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
United States.....	5.8	9.1	6.7	6.5	7.6	11.3	13.5	10.3	6.1	3.2	4.3	3.5	1.9	3.7
OECD, total.....	5.8	11.3	8.7	8.9	7.8	9.7	13.0	10.5	7.7	5.3	5.2	4.5	2.6	3.2
OECD, Europe.....	5.6	13.3	11.0	11.2	9.0	10.4	14.6	12.1	10.3	8.3	7.5	6.6	4.0	3.8
Australia.....	3.9	15.1	13.5	12.3	7.9	9.1	10.2	9.6	11.1	10.1	3.9	6.8	9.1	8.5
Canada.....	3.4	10.8	7.5	8.0	8.9	9.2	10.2	12.5	10.8	5.8	4.3	4.0	4.2	4.4
Japan.....	7.7	11.8	9.3	8.1	3.8	3.6	8.0	4.9	2.7	1.9	2.2	2.1	4	-2
New Zealand.....	6.5	14.7	16.9	14.3	11.9	13.8	17.1	15.4	16.1	7.4	6.2	15.4	13.2	15.7
Austria.....	4.4	8.4	7.3	5.5	3.6	3.7	5.4	8.8	5.4	3.3	5.6	3.2	1.7	1.4
Belgium.....	3.9	12.8	9.2	7.1	4.5	4.5	6.6	7.6	8.7	7.7	6.3	4.9	1.3	1.8
Denmark.....	5.8	9.6	9.0	11.1	10.0	9.6	12.3	11.7	10.1	6.9	6.3	4.7	3.6	4.0
Finland.....	2.8	17.9	14.4	12.6	7.8	7.5	11.6	12.0	9.6	8.3	7.1	5.9	2.9	4.1
France.....	5.2	11.8	9.6	9.4	9.1	10.8	13.6	13.4	11.8	5.6	7.4	5.8	2.7	3.1
Greece.....	3.2	13.4	13.3	12.1	12.6	18.0	24.9	24.5	21.0	20.2	18.5	19.3	23.0	16.4
Ireland.....	8.2	20.9	18.0	13.6	7.6	13.3	18.2	20.4	17.1	10.5	8.6	5.4	3.8	3.2
Italy.....	5.1	17.2	16.5	18.1	12.4	15.7	21.1	18.7	16.3	15.0	10.6	8.6	6.1	4.8
Luxembourg....	4.6	10.7	9.8	6.7	3.1	4.5	6.3	8.1	9.4	8.7	4.6	4.1	.3	-1
Netherlands.....	3.6	10.2	8.8	6.4	4.1	4.2	6.5	6.7	6.0	2.8	3.3	2.3	.2	-5
Norway.....	10.6	11.7	9.1	9.1	8.1	4.8	10.9	13.7	11.3	8.4	6.2	5.7	7.2	8.7
Portugal ¹	6.3	20.4	19.3	27.2	22.5	23.9	16.6	20.0	22.4	25.5	29.3	19.3	11.7	9.4
Spain.....	5.7	16.9	17.7	24.5	19.8	15.7	15.5	14.6	14.4	12.2	11.3	8.8	8.8	5.8
Sweden.....	7.0	9.8	10.3	11.4	10.0	7.2	13.7	12.1	8.6	8.9	8.0	7.4	4.3	4.2
Switzerland.....	3.8	6.7	1.7	1.3	1.1	3.6	4.0	6.5	5.6	3.0	3.0	3.4	.7	1.5
Turkey ¹	7.9	18.2	17.4	27.1	45.3	58.7	110.2	35.6	30.8	31.4	48.4	45.0	34.6	38.9
United Kingdom.....	6.4	24.2	16.5	15.8	8.3	13.4	18.0	11.9	8.6	4.6	5.0	6.1	3.4	4.2
West Germany....	3.4	6.0	4.5	3.7	2.7	4.1	5.5	6.3	5.3	3.3	2.4	2.2	-.2	.2

¹ Excludes rent.

Source: Organization for Economic Cooperation and Development, Paris, France, *Main Economic Indicators*, monthly.

No. 763. CONSUMER PRICE INDEX BY REGION: 1975 TO 1987

[1982-84=100. For composition of regions, see fig. 1, inside front cover]

ITEM	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
U.S. city average, all items.....	53.8	56.9	60.6	65.2	72.6	82.4	90.9	96.5	99.6	103.9	107.6	109.6	113.6
Food.....	59.8	61.6	65.5	72.0	79.9	86.8	93.6	97.4	99.4	103.2	105.6	109.0	113.5
Housing.....	50.7	53.8	57.4	62.4	70.1	81.1	90.4	96.9	99.5	103.6	107.7	110.9	114.2
Gas (piped) and electricity...	40.1	44.7	50.5	55.0	61.0	71.4	81.9	93.2	101.5	105.4	107.1	105.7	103.8
Northeast:													
All items.....	55.8	59.0	62.3	66.2	72.8	82.2	91.0	95.8	99.8	104.5	108.4	111.1	118.0
Food.....	60.4	62.4	65.8	72.1	79.3	86.5	93.4	97.3	99.4	103.3	106.2	110.1	115.8
Housing.....	(NA)	(NA)	(NA)	(NA)	63.6	70.2	80.7	95.7	98.7	104.6	109.0	112.7	117.3
Gas (piped) and electricity...	(NA)	(NA)	(NA)	57.9	64.0	73.8	85.4	94.4	100.9	104.7	105.9	104.6	101.2
North Central:													
All items.....	53.0	56.1	59.9	64.7	72.6	82.4	90.1	96.5	99.9	103.6	106.8	108.0	111.9
Food.....	60.3	62.6	66.6	73.5	81.5	88.5	94.9	98.1	99.3	102.7	104.4	107.5	111.8
Housing.....	(NA)	(NA)	(NA)	(NA)	60.8	69.2	80.0	87.7	98.3	100.3	103.5	107.0	109.4
Gas (piped) and electricity...	(NA)	(NA)	(NA)	55.5	62.1	70.1	79.1	90.7	103.3	106.1	108.6	107.1	104.6
South:													
All items.....	53.3	58.3	60.0	65.0	72.4	81.9	90.7	96.5	99.7	103.8	107.1	108.9	112.4
Food.....	59.7	61.1	65.1	71.7	79.8	86.6	93.5	97.1	99.3	103.6	105.7	108.8	113.1
Housing.....	(NA)	(NA)	(NA)	62.6	70.2	80.8	90.4	97.5	99.6	103.0	106.3	109.0	111.0
Gas (piped) and electricity...	(NA)	(NA)	(NA)	56.4	61.7	70.2	82.6	94.1	100.8	105.0	106.0	105.1	104.3
West:													
All items.....	52.6	55.8	59.9	65.0	72.6	83.3	91.9	97.4	99.0	103.6	108.0	110.5	114.3
Food.....	57.8	59.0	63.6	70.7	78.7	85.2	92.3	96.7	99.7	103.6	106.1	109.0	112.9
Housing.....	(NA)	(NA)	(NA)	63.2	70.8	83.3	92.6	98.4	99.2	103.3	108.8	113.0	116.5
Gas (piped) and electricity...	(NA)	(NA)	(NA)	47.5	53.1	72.1	80.3	94.6	99.9	105.6	108.1	105.8	105.5

NA Not available.

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review* and *CPI Detailed Report*, January issues.

**NO. 764. AVERAGE PRICES (UNIT VALUES)—SELECTED COMMODITIES EXPORTED AND IMPORTED:
1970 TO 1987**

[In dollars per unit. Includes trade of Puerto Rico with foreign countries. Unit values obtained by dividing annual values of domestic exports and imports of merchandise for consumption by annual quantities. Values of goods exported represent those at port of export. For 1970, values of goods imported represent market values in country from which imported; transaction values f.a.s. (free alongside ship) at port of export for 1980; and customs value beginning in 1982. Unit values may show actual price movements only roughly for commodities subject to considerable price variations among different grades, methods of packing, etc., and to year-to-year variations in proportions of grades, etc. Unit values of agricultural exports also include effects of Commodity Credit Corporation sales for export]

COMMODITY	Unit	1970	1980	1982	1983	1984	1985	1986	1987
EXPORTS									
Wheat.....	Bushel.....	1.58	4.85	4.46	4.41	4.17	3.95	3.34	2.70
Milled rice, less than 75% broken kernels.....	Lb.....	.08	.20	.19	.19	.19	.17	.11	.11
Corn.....	Bushel.....	1.45	3.41	2.91	3.40	3.63	3.00	2.11	1.81
Grain sorghums.....	Bushel.....	1.32	3.34	2.92	3.36	3.17	2.85	2.23	1.98
Wheat flour.....	100 lb.....	3.85	12.17	11.26	6.89	11.09	9.57	8.81	6.48
Leaf tobacco, flue-cured, unstemmed.....	Lb.....	.92	2.11	2.62	2.70	2.82	2.54	2.41	2.39
Cigarettes.....	1,000.....	5.45	12.87	16.78	18.55	19.82	20.02	20.30	20.42
Soybeans.....	Bushel.....	2.80	7.35	6.64	7.09	7.57	6.04	5.01	4.57
Synthetic rubber, "s" type ¹	Lb.....	.18	.40	.46	.44	.44	.44	.37	.38
Woodpulp, special alpha and dissolving grades.....	Sh. ton.....	187	512	519	504	511	474	477	513
Cotton, upland, staple 1" to 1½".....	Lb.....	.26	.71	.64	.69	.74	.68	.76	.28
Cotton, upland, staple, 1½" and over.....	Lb.....	.31	.82	.74	.75	.80	.75	.34	.65
Bituminous coal.....	Sh. ton.....	13	40	56	49	51	45	48	43
Steel scrap, No. 1, heavy melting.....	Sh. ton.....	43	102	74	74	86	79	102	94
Tallow, inedible.....	Lb.....	.09	.22	.20	.18	.23	.20	.14	.15
Soybean oil, crude.....	Lb.....	.12	.27	.22	.22	.31	.30	.21	.19
Carbon steel sheets, cold rolled.....	Lb.....	.08	.18	.25	.24	.28	.30	.19	.20
Polyethylene resin.....	Lb.....	.13	.42	.34	.34	.38	.32	.37	.40
Styrene, polymer, and copolymer resins.....	Lb.....	.19	.58	.66	.67	.71	.74	.66	.70
Container board liners.....	Lb.....	.06	.16	.14	.13	.15	.13	.28	.66
Nylon yarn, incl. monofilaments.....	Lb.....	.95	1.41	1.54	1.49	1.24	1.33	1.07	1.14
Carbon black, furnace.....	Lb.....	.09	.33	.52	.58	.61	.64	.75	.58
Copper, refined, crude forms.....	Lb.....	.67	.97	.68	.74	.69	.63	.67	.93
Aluminum metal and alloys.....	Lb.....	.26	.81	.75	.89	.90	.68	.74	.95
IMPORTS									
Canned beef.....	Lb.....	.43	1.44	1.15	1.14	1.04	1.14	1.15	1.40
Cashew nuts.....	Lb.....	.60	2.02	1.61	1.59	2.12	1.95	2.52	2.81
Raw sugar.....	Lb.....	.07	.22	.15	.18	.19	.18	.16	.15
Coffee (Brazil).....	Lb.....	.47	1.87	1.25	1.24	1.31	1.27	1.72	.94
Coffee (Colombia).....	Lb.....	.54	1.70	1.40	1.28	1.37	1.27	1.69	1.16
Cocoa (cacao beans, Africa).....	Lb.....	.35	1.26	.82	.73	.92	.95	1.00	.94
Tea (Sri Lanka).....	Lb.....	.39	.86	.76	.98	1.37	.95	.79	.89
Whisky, containers of 1 gal. or less (U.K.).....	Proof gal.....	7.48	13.58	16.78	16.33	16.49	16.80	11.85	13.57
Whisky, containers of 1 gal. or less (Canada).....	Proof gal.....	6.70	9.99	12.94	13.06	13.56	12.71	6.47	5.91
Cigarette leaf, unstemmed.....	Lb.....	.57	1.27	1.43	1.54	1.52	1.49	1.48	1.37
Goat and kid skins, dry.....	Lb.....	1.06	5.10	2.26	2.83	1.86	1.40	3.97	4.16
Crude rubber, except milk.....	Lb.....	.19	.59	.37	.42	.45	.35	.35	.40
Sawed lumber, fir.....	Mill. bd. ft.....	.71	255	170	212	187	205	209	208
Sawed lumber, spruce.....	Mill. bd. ft.....	.74	192	163	195	185	181	190	182
Woodpulp, sulphite, bleached, exc. rayon and special chemical grades.....	Sh. ton.....	143	444	449	417	418	399	369	222
Woodpulp, sulphate, bleached.....	Sh. ton.....	144	432	377	339	412	333	333	403
Apparel wool, 60's and finer ²	Lb.....	.88	1.70	1.78	1.57	1.51	1.57	1.97	2.27
Iron ore (Canada).....	Ton.....	12,42	33,61	38,82	38,44	37,05	38,01	36,04	31,53
Iron ore (Venezuela).....	Ton.....	8,33	22,48	33,64	34,97	22,92	24,10	21,11	21,07
Manganese ore, metallurgical grade ³	Lb.....	.02	.07	.09	.06	.02	.03	.04	.04
Bauxite, crude.....	Ton.....	10,91	27,81	33,14	29,17	30,26	29,41	27,98	24,17
Copper ores and concentrates ³	Lb.....	.62	.70	.56	.49	.62	.51	.56	.65
Crude petroleum (Venezuela) ⁴	Bbl.....	2,30	27,64	33,84	27,78	28,57	27,02	13,59	15,58
Newsprint.....	Sh. ton.....	140	369	421	399	418	428	429	464
Jute burlap.....	Lb.....	.23	.38	.48	.47	.52	.59	.41	.31
Concrete reinforcement bars.....	Lb.....	.05	.15	.12	.09	.10	.11	.11	.12
Steel tubes and pipes, at least .065" thick, ¾" diameter.....	Lb.....	.08	.23	.31	.24	.21	.50	.39	.39
Copper, refined (Chile) ³	Lb.....	.63	.99	.66	.71	.82	.62	.60	.71
Nickel in pigs, ingots, shot, etc.	Lb.....	1.30	3.17	2.81	2.33	2.31	2.46	2.01	2.01
Tin bars, blocks, pigs, etc. (Malaysia).....	Lb.....	1.66	7.75	5.89	6.00	5.52	5.37	3.15	2.97

¹ Excludes latex (liquid). ² Clean content. ³ Metal content. ⁴ Testing 25° API or more.

Source: U.S. Bureau of the Census, *U.S. Exports, Schedule B Commodity, By Country*, Report FT 446, annual; and *U.S. Imports for Consumption and General Imports, TSUSA Commodity by Country of Origin*, Report FT 246, annual.

Prices

NO. 765. IMPORT PRICE INDEXES—SELECTED COMMODITIES: 1980 TO 1988

[1985=100, except as noted. Index values are given for the June quarter of each year. Indexes are weighted by the 1980 Tariff Schedule of the United States Annotated, a scheme for describing and reporting product composition and value of U.S. imports. Import prices are based on U.S. dollar prices paid by importer. F.o.b.=Free on board; c.i.f.=Cost, insurance, and freight]

COMMODITY	1980	1981	1982	1983	1984	1985	1986	1987	1988	
All commodities.....	(NA)	(NA)	(NA)	102.8	103.9	99.2	98.7	110.0	116.9	
Food.....	105.1	98.5	92.1	98.6	104.2	98.9	107.3	108.3	113.9	
Meat.....	112.5	114.9	114.2	111.2	107.9	94.0	96.0	108.0	107.1	
Meat and edible meat offals, fresh, chilled or frozen.....	114.5	116.4	115.0	115.0	109.4	93.2	91.1	102.0	104.7	
Meat and edible meat offals, prepared or preserved, n.e.s. ² ; fish extracts.....	108.7	112.7	114.3	102.4	105.8	95.6	106.5	120.6	111.5	
Dairy products and eggs.....	(NA)	100.9	104.4	102.5	100.7	98.7	108.7	122.3	126.0	
Fish.....	94.5	102.4	103.1	101.7	101.9	98.6	110.5	126.0	128.1	
Shellfish, fresh, chilled, frozen, salted, or dried, c.i.f.....	84.0	91.9	101.6	105.4	106.7	98.4	113.3	123.2	122.8	
Fish in airtight containers, c.i.f.....	111.8	117.6	115.5	102.3	102.3	98.1	103.6	113.7	130.2	
Bakery goods ³	95.7	100.8	100.3	95.8	98.4	97.1	112.5	126.2	138.9	
Fruit and vegetables.....	79.2	100.1	88.5	104.4	107.4	103.0	100.0	110.1	120.3	
Sugar ⁴	(NA)	70.0	98.2	101.8	102.3	104.6	109.8	110.0	109.0	
Coffee, tea, cocoa.....	114.9	80.6	84.6	89.0	105.6	96.8	117.2	87.0	93.4	
Beverages and tobacco.....	85.7	92.8	96.2	98.7	98.2	99.2	105.2	112.8	116.2	
Beverages.....	87.2	94.5	97.8	98.2	98.3	98.9	106.1	114.2	119.9	
Alcoholic.....	87.2	94.5	97.8	98.3	98.2	98.9	105.8	113.7	119.8	
Wine of fresh grapes, c.i.f.....	92.7	98.5	100.5	100.1	96.2	98.7	109.7	121.0	127.2	
Beer, c.i.f.....	(NA)	97.4	97.8	98.5	98.5	100.1	103.2	111.4	114.2	
Spirits, c.i.f.....	80.5	91.9	98.7	97.6	99.4	98.5	104.1	109.1	116.8	
Crude materials.....	(NA)	(NA)	(NA)	(NA)	108.4	100.5	106.4	116.2	137.8	
Crude rubber ⁵	(NA)	(NA)	(NA)	(NA)	120.9	101.0	99.5	103.7	151.1	
Wood.....	(NA)	(NA)	(NA)	(NA)	92.5	118.8	99.8	104.3	110.2	111.4
Lumber.....	94.8	98.5	90.8	122.5	99.8	105.4	104.6	110.0	111.1	
Pulp and waste paper.....	(NA)	(NA)	121.2	101.4	121.3	101.4	100.3	132.0	160.5	
Crude minerals.....	(NA)	(NA)	(NA)	(NA)	98.0	100.6	99.0	99.8	101.0	
Metaliferous ores and metal scrap.....	(NA)	(NA)	(NA)	(NA)	114.5	95.6	121.6	124.5	167.6	
Ores and concentrates of base metals, n.e.s. ²	(NA)	(NA)	(NA)	(NA)	120.4	94.5	134.0	136.4	192.9	
Crude vegetable and animal materials, n.e.s. ²	(NA)	(NA)	(NA)	(NA)	91.6	94.8	111.3	109.0	148.0	
Fuels and related products.....	(NA)	(NA)	123.5	108.4	108.7	99.7	51.5	74.1	84.7	
Crude petroleum and petroleum products.....	(NA)	(NA)	121.7	106.6	107.2	99.5	49.0	74.4	65.0	
Crude petroleum.....	120.3	131.9	125.1	106.3	107.7	100.5	45.8	68.7	59.5	
Natural gas and LNG.....	(NA)	(NA)	160.8	134.9	131.0	102.3	79.7	67.8	68.7	
Fats and oils.....	(NA)	(NA)	(NA)	(NA)	174.3	110.0	66.7	87.9	111.2	
Chemical and related products.....	(NA)	(NA)	(NA)	103.9	104.5	100.4	99.7	104.8	116.3	
Intermediate manufactured products.....	105.9	107.0	102.9	101.7	104.2	99.1	103.6	112.5	131.6	
Leather and furskins.....	103.1	101.4	98.9	97.0	105.8	97.9	106.3	116.8	137.0	
Rubber manufactures.....	100.4	106.8	107.9	103.5	102.2	99.5	101.2	104.6	107.7	
Cork and wood manufactures.....	103.7	107.5	101.1	107.0	104.4	99.2	111.0	124.3	137.8	
Paper and paperboard products.....	84.3	90.2	95.3	90.7	95.7	99.9	100.8	104.9	118.3	
Paper and paperboard.....	83.8	88.5	95.1	90.1	95.1	100.0	98.9	102.5	115.5	
Newspaper, c.i.f.....	83.0	88.7	94.8	88.7	94.0	100.1	99.2	105.0	118.1	
Textiles.....	101.5	103.8	99.5	97.8	99.4	98.9	105.4	111.8	120.8	
Non-metallic mineral manufactures.....	100.9	95.8	100.1	105.4	108.0	98.2	110.5	126.7	142.5	
Iron and steel.....	99.2	108.6	108.3	95.4	102.9	100.2	98.9	106.8	127.2	
Non-ferrous metals.....	(NA)	(NA)	107.2	119.2	118.1	100.2	98.9	112.4	154.6	
Silver, platinum and other metals of platinum group, c.i.f.....	(NA)	(NA)	100.3	148.8	132.9	94.8	106.8	141.7	135.7	
Copper.....	129.7	123.2	110.0	114.6	104.6	100.6	103.9	107.8	148.8	
Nickel, c.i.f.....	(NA)	(NA)	117.3	96.9	98.1	105.7	86.1	83.5	262.4	
Zinc.....	91.2	106.7	87.0	91.7	126.9	109.4	83.2	101.3	147.2	
Tin, c.i.f.....	148.5	119.4	114.6	116.5	108.8	103.9	94.0	80.4	62.0	
Metal manufactures, n.e.s. ²	103.3	106.5	104.3	99.5	100.5	99.2	107.9	112.7	127.9	
Machinery and transport equipment.....	(NA)	98.5	99.8	100.7	100.5	98.9	110.4	119.9	127.3	
Machinery specialized for particular industries.....	(NA)	(NA)	102.9	104.3	100.1	98.4	116.9	136.1	149.5	
Metalworking machinery.....	109.6	107.0	109.7	106.1	102.1	98.3	113.0	128.1	142.5	
General industrial machinery, parts n.e.s. ²	(NA)	107.8	105.8	103.3	101.8	98.0	116.2	130.8	149.5	
Office machines ⁶	109.8	108.6	105.0	104.3	105.8	98.5	108.1	114.0	119.6	
Telecommunications ⁷	115.0	118.1	113.0	110.1	107.4	100.2	108.4	110.3	114.0	
Electric machinery and equipment.....	(NA)	(NA)	115.3	115.7	107.2	100.3	106.4	115.8	123.8	
Road vehicles and parts.....	(NA)	88.0	93.0	94.5	97.2	98.8	110.8	120.5	127.7	
Misc. manufactured articles.....	100.3	102.6	101.3	101.6	102.7	99.2	106.8	117.8	125.8	
Plumbing, heating and lighting fixtures.....	87.8	89.4	91.8	94.2	98.3	98.6	108.6	117.0	127.0	
Furniture and parts.....	106.8	105.1	107.9	104.8	102.5	98.6	109.0	116.5	124.0	
Footwear, c.i.f.....	101.1	104.1	100.7	97.5	102.0	98.1	108.0	119.8	130.2	
Professional, scientific and controlling instruments and apparatus.....	109.4	110.3	109.8	104.0	102.3	96.1	117.9	135.9	142.2	
Photographic apparatus ⁸	111.1	111.5	104.8	100.1	101.5	98.9	113.8	126.0	129.3	
Misc. manufactured articles, n.e.s. ²	(NA)	(NA)	108.4	104.4	103.0	99.8	108.1	121.1	132.1	

NA Not available. ¹ June 1985 may not equal 100 because indexes were reweighted to an "average" trade value in 1985. ² N.e.s.=not elsewhere specified. ³ Includes pasta products, grain and grain preparations. ⁴ Includes sugar preparations and honey. ⁵ Includes synthetic and reclaimed rubber. ⁶ Includes automatic data processing equipment. ⁷ Includes sound recording and reproducing equipment. ⁸ Includes photographic supplies, optical goods, watches and clocks.

Source: U.S. Bureau of Labor Statistics, *News*, quarterly.

Export Price Indexes

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No. 766. EXPORT PRICE INDEXES—SELECTED COMMODITIES: 1980 TO 1988

[1985=100, except as noted. Index values are given for June quarter of each year. Indexes are weighted by 1980 export values according to the Schedule B classification system of the U.S. Bureau of the Census. Prices used in these indexes were collected from a sample of U.S. manufacturers of exports and are f.o.b. (free on board) factory transaction prices, except as noted.]

COMMODITY	1980	1981	1982	1983	1984	1985 ¹	1986	1987	1988
All commodities	(NA)	(NA)	(NA)	(NA)	104.1	100.4	99.1	102.2	109.4
Food	(NA)	(NA)	111.5	116.3	100.5	97.1	89.9	103.4	
Meat	(NA)	(NA)	94.4	102.1	98.8	105.2	121.2	131.8	
Fish	(NA)	(NA)	94.2	95.3	101.2	108.6	125.8	144.7	
Grain and grain preparations	106.5	125.8	105.9	117.4	121.8	102.5	89.0	71.0	87.2
Wheat	113.7	118.3	107.5	112.2	110.2	99.8	80.7	66.8	87.8
Rice	128.3	167.1	104.9	118.4	107.2	101.6	67.9	53.1	105.7
Corn, yellow, f.o.b	99.7	126.5	104.3	120.4	131.3	104.0	95.2	72.7	83.7
Other grain					(NA)	106.3	98.5	77.7	87.6
Fruits and vegetables					85.7	102.8	100.1	108.6	112.4
Feedstuff for animals					132.3	129.9	90.9	114.8	123.8
Miscellaneous food products					91.8	100.5	99.9	97.0	100.6
Beverages and tobacco					100.4	102.4	100.1	97.4	105.0
Tobacco and tobacco products					100.7	102.5	100.1	97.1	105.0
Crude materials					104.5	123.6	101.6	102.2	114.5
Raw hides and skins	76.4	94.7	89.1	90.3	118.1	97.4	117.1	149.6	164.2
Oilseeds and oleaginous fruit	109.3	132.2	113.7	110.8	154.1	105.5	98.1	101.6	142.0
Crude rubber, f.a.s. ²	(NA)	(NA)	(NA)	(NA)	100.3	99.8	99.9	101.0	106.1
Wood	122.8	107.7	106.1	99.6	101.3	98.7	101.4	116.2	149.5
Pulp and waste paper					104.4	127.5	100.3	116.4	148.9
Textile fibers					120.5	120.1	103.5	98.8	112.4
Cotton	108.3	120.1	101.8	106.8	120.5	103.5	98.8	108.8	
Crude minerals and fertilizers	120.5	131.7	103.1	113.2	133.0	103.4	95.5	114.4	108.8
Metal ores and scrap	79.2	91.5	90.9	87.2	88.9	100.4	98.4	94.0	94.9
Scrap metal (iron or steel) f.a.s. ²	123.4	113.4	93.3	95.7	112.1	100.2	96.1	95.8	147.7
Nonferrous base metal waste and scrap, n.e.s. ² , f.a.s. ²					117.0	118.9	98.9	101.3	126.9
Fuels and related products									165.6
Coal and coke						101.5	101.8	76.8	82.1
Crude petroleum and petroleum products ³						100.5	94.0	88.2	91.8
Fats and oils						(NA)	(NA)	(NA)	97.7
Vegetable oils						79.6	130.9	113.4	67.7
Chemicals and related products						71.3	125.8	116.8	70.6
Organic chemicals						99.1	102.4	100.2	98.0
Hydrocarbons, n.e.s. ² and derivatives f.a.s. ²	136.3	138.3	117.6	111.7	113.9	101.4	86.4	142.8	170.7
Alcohols, phenols, phenol-alcohols, and derivatives, f.a.s. ²	117.6	115.6	112.0	108.0	107.2	99.9	96.9	102.7	143.8
Carboxylic acids, f.a.s. ²	101.1	103.2	100.7	96.5	104.2	100.7	99.0	103.2	127.6
Fertilizers, manufactured						98.2	107.1	97.2	93.0
Pesticides, starches, glue, gas and oil additives, chemical materials and products, n.e.s. ²						97.1	99.8	101.8	97.7
Intermediate manufactured products									102.3
Leather and fur skins						97.9	100.6	101.6	100.2
Rubber manufactures	103.4	103.3	89.7	88.5	104.5	99.1	103.8	126.9	125.1
Paper and paperboard products	82.6	92.4	97.8	95.9	98.7	100.2	100.1	102.5	108.8
Textiles	86.0	93.4	92.0	89.5	102.0	100.5	104.7	117.0	129.0
Non-metallic mineral manufactures ⁴						(NA)	(NA)	102.9	103.7
Iron and steel						105.0	100.2	100.4	108.7
Non-ferrous metals						102.6	123.5	111.8	102.0
Metal manufactures, n.e.s. ²						94.6	95.5	98.3	99.7
Machinery and transport equipment ⁵	79.1	86.4	93.0	94.9	97.8	100.0	100.8	101.8	103.9
Power generating machinery ⁶	70.5	80.4	88.5	90.6	93.2	100.1	102.4	103.7	108.5
Internal combustion piston engines, parts	73.5	82.9	91.2	96.2	99.8	99.8	101.4	102.9	107.1
Electric motors, generators, and other rotating plant, f.o.b., factory									
Machinery specialized for particular industries	84.5	88.4	95.9	95.8	95.7	101.0	103.2	107.7	117.9
Agricultural machinery and parts ⁷	76.9	86.3	93.7	95.6	98.1	100.0	100.3	100.1	103.6
Civil engineering and contractors, plant and equipment ⁸	72.6	80.1	86.6	93.6	97.6	99.7	100.4	101.2	102.0
Metalworking machinery	77.4	89.3	99.5	97.5	99.6	100.3	98.4	96.0	98.6
General industrial machines, parts, n.e.s. ²	77.5	86.1	93.8	95.2	97.0	99.7	102.0	106.7	111.3
76.6	85.7	93.1	94.6	97.2	100.0	101.6	104.5	108.0	
Office machines ⁹	101.6	106.5	106.0	104.6	102.4	99.8	99.0	96.1	95.6
Telecommunications ¹⁰	88.8	91.5	96.7	98.9	99.8	99.8	98.9	101.4	104.6
Electrical machinery, equipment	87.6	90.0	94.9	94.8	98.4	100.9	99.2	102.1	102.8
Road vehicles and parts	76.8	83.3	90.1	93.4	97.5	100.1	101.7	103.5	104.7
Other transport equipment ⁵	64.4	73.2	83.8	88.5	94.5	99.2	103.1	105.5	109.6

NA Not available. ¹ June 1985 may not equal 100 because indexes were reweighted to an "average" trade value in 1985.

² F.a.s.= free alongside ship. N.e.s.= not elsewhere specified. ³ December 1987=100. ⁴ September 1985=100.

⁵ Excludes military and commercial aircraft. ⁶ Includes equipment. ⁷ Excludes tractors. ⁸ Includes parts. ⁹ Includes data processing equipment. ¹⁰ Includes sound recording and reproducing equipment.

Source: U.S. Bureau of Labor Statistics, *News*, quarterly.

Prices

No. 767. SELECTED MINERAL PRODUCTS—AVERAGE PRICES: 1975 TO 1987

[Represents average price except as noted. Excludes Alaska and Hawaii, except as noted. See also *Historical Statistics, Colonial Times to 1970*, series M96, 139, 148, 209, 248, and 262.]

MINERAL	UNIT	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987, prel.
Aluminum ¹	Cents/lb.....	39.8	51.6	54.0	61.0	71.6	76.0	76.0	77.8	81.0	81.0	81.0	72.3
Bituminous coal ^{2,3}	Dol./sh. ton.....	19.23	19.82	21.78	23.65	24.52	26.29	27.14	25.85	25.51	25.10	23.70	23.00
Cobalt ⁴	Dol./lb.....	3.98	5.58	6.40	24.58	25.00	14.58	8.56	5.76	10.40	11.43	7.48	6.56
Copper, electrolytic ⁵	Cents/lb.....	64.2	66.8	66.5	93.3	101.3	84.2	72.8	76.5	66.8	67.0	66.1	82.5
Gold ⁶	Dol./fine oz.....	161	148	194	308	613	460	376	424	361	318	368	448
Lead (NY) ⁷	Cents/lb.....	21.5	30.7	33.7	52.6	42.5	36.5	25.5	21.7	25.6	19.1	22.1	35.9
Natural gas ^{2,8}	Dol./1,000 cu. ft. ....	.45	.79	.91	1.18	1.59	1.98	2.48	2.59	2.66	2.51	1.94	1.71
Nickel ⁹	Dol./lb.....	2.20	2.41	2.10	3.20	2.85	2.65	2.24	2.20	2.22	2.26	1.86	2.28
Petroleum, crude ²	Dol./bbl.....	7.67	8.57	9.00	12.64	21.58	31.77	28.52	26.19	25.88	24.09	12.51	15.41
Platinum ¹⁰	Dol./troy oz.....	164	162	237	382	439	475	475	475	475	475	519	600
Silver ¹¹	Dol./fine oz.....	4.42	4.62	5.40	11.09	20.83	10.52	7.95	11.44	8.14	6.14	5.47	7.01
Tungsten concentrate ⁹	Dol./lb.....	5.30	9.15	8.22	8.40	8.38	7.96	6.35	4.70	5.18	4.22	3.21	2.88
Zinc ¹⁰	Cents/lb.....	39.0	34.4	31.0	37.3	37.4	44.6	38.5	41.4	48.6	40.4	38.0	41.9

¹ 19.5 percent primary aluminum ingot. ² Average value at point of production; includes Alaska. Source: U.S. Energy Information Administration, *Annual Energy Review* and *Monthly Energy Review*. ³ Includes subbituminous coal and lignite.

⁴ Weighted average based on the market price quoted by a major U.S. cobalt dealer, otherwise based on range of prices.

⁵ Represents low price for year. Price ranged from low 6.40 lb. to 20.00 per lb. ⁶ Average value of marketed production.

⁷ 1975-1979, peak price quoted U.S. buyers by International Nickel Co., Inc., for electrolytic nickel, includes U.S. duty f.o.b. Port Colborne, Ontario; thereafter, from New York dealer. ⁸ Producer prices. ⁹ Average value of shipments. ¹⁰ Delivered price.

Source: Except as noted, U.S. Bureau of Mines, *Minerals Yearbook*.

No. 768. COMMODITY RESEARCH BUREAU FUTURES PRICE INDEX: 1975 TO 1987

[1967 = 100. Index computed daily. Represents unweighted geometric average of commodity futures prices (through 9 months forward) of 21 major commodity futures markets. Represents end of year index]

ITEM	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
All commodities.....	191.0	204.7	200.3	227.8	281.5	308.5	254.9	234.0	277.8	244.2	229.2	209.1	232.5
Imported.....	259.4	348.1	334.8	345.0	425.3	426.0	357.0	269.0	326.0	291.7	388.2	321.2	356.1
Industrial.....	154.8	173.6	175.0	222.1	354.8	324.6	249.2	249.9	249.0	217.0	211.7	210.4	252.5
Grains.....	195.6	192.5	179.0	187.8	251.9	312.1	251.3	215.1	249.6	224.0	198.5	184.6	186.1
Oilseeds.....	181.8	229.7	208.6	240.6	256.1	314.6	271.0	236.9	318.6	273.5	248.4	189.8	223.6
Livestock and meats.....	180.8	162.5	166.9	196.4	195.0	217.4	195.3	219.9	229.7	240.8	206.9	200.2	189.9
Metals (precious) ¹	141.0	149.5	163.8	230.4	658.0	531.4	319.7	366.0	328.5	243.3	256.6	286.6	346.4

¹ Prior to 1979, index for metals only.

Source: Commodity Research Bureau (CRB), New York City, NY, CRB Commodity Index Report, weekly. (Copyright.)

No. 769. FOOD PRICES—FARM VALUE AND RETAIL PRICE FOR SELECTED ITEMS: 1980 TO 1987

[In dollars per retail unit indicated. The farm value is the payment to farmers for the quantity of farm products equivalent to the unit sold at retail minus imputed value of byproducts. Because of losses from processing, waste, and spoilage, the farm value represents larger quantities than the retail unit]

FOOD ITEM	UNIT	FARM VALUE					RETAIL PRICE				
		1980	1984	1985	1986	1987	1980	1984	1985	1986	1987
Beef, choice.....	lb.....	1.45	1.40	1.27	1.24	1.38	2.38	2.40	2.33	2.31	2.42
Pork.....	lb.....	.63	.77	.71	.82	.83	1.62	1.60	1.62	1.78	1.88
Broilers.....	lb.....	.38	.44	.40	.46	.41	.73	.81	.78	.84	.78
Eggs, grade A.....	Doz.....	.51	.66	.52	.54	.49	.84	1.01	.80	.87	.78
Milk, sold in stores.....	1/2 gal.....	.56	.58	.56	.56	.56	1.05	1.13	1.13	1.11	1.14
Bread, white ¹	lb.....	.05	.05	.05	.05	.04	.51	.54	.55	.56	.55
Potatoes, Northeast white round.....	10 lb.....	.82	.68	.37	.50	.62	1.80	1.91	1.60	1.56	2.40
Oranges, California.....	lb.....	.05	.17	.12	.08	.10	.36	.50	.53	.48	.55
Lettuce, California ²	lb.....	.05	.04	.07	.06	.10	.46	.50	.53	.54	.80
Orange juice, frozen.....	12 oz.....	.36	.49	.62	.39	.42	.88	1.22	1.32	1.07	1.11
Tomatoes, California ³	lb.....	.05	.05	.05	.05	.05	.42	.53	.52	.51	.51

¹ Farm value includes value for wheat, lard, soybean oil, high fructose corn syrup, and soy-whey blend. ² Farm value represents value in the field. Harvesting and packing, a contract operation, appears as processing or packing cost. ³ Whole canned tomatoes.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Food Cost Review*, 1987.

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No. 770. FOOD—RETAIL CONSUMER PRICE INDEXES, SELECTED AREAS: 1970 TO 1987

[1982=100. See headnote table 761 and text, section 15 regarding MSA's]

AREA	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Total food.....	39.2	59.8	86.8	93.6	97.4	98.4	103.2	105.6	109.0	113.5
Anchorage, AK MSA.....	(NA)	92.6	90.5	94.8	97.3	99.7	103.1	106.2	110.8	113.3
Atlanta, GA MSA.....	38.2	60.5	85.6	93.1	97.0	99.7	103.2	106.1	111.3	112.2
Baltimore, MD MSA.....	40.6	61.7	88.2	94.3	96.5	99.4	104.0	107.2	112.2	117.1
Boston-Lawrence-Salem, MA-NH CMSA.....	41.9	63.9	89.4	94.7	96.7	98.0	104.3	108.5	113.5	119.2
Buffalo-Niagara Falls, NY CMSA.....	41.0	61.2	86.8	94.4	97.5	99.8	102.6	106.0	108.6	112.4
Chicago-Gary-Lake County, IL-IN-WI CMSA.....	40.8	61.8	91.2	96.5	98.7	99.3	101.9	104.1	108.8	113.1
Cincinnati-Hamilton, OH-KY-IN CMSA.....	37.1	57.3	85.4	92.7	96.8	99.1	104.1	104.9	107.5	111.0
Cleveland-Akron-Lorain, OH CMSA.....	39.5	59.2	85.5	93.0	96.2	99.7	104.0	106.2	107.5	111.3
Dallas-Fort Worth, TX CMSA.....	38.1	57.3	85.6	92.4	96.1	99.6	104.3	107.0	111.0	116.1
Denver-Boulder, CO CMSA.....	(NA)	62.1	86.2	93.5	98.2	99.4	104.4	105.2	106.9	107.5
Detroit-Ann Arbor, MI CMSA.....	41.7	62.2	88.9	95.7	99.4	99.2	101.4	103.1	107.1	110.3
Honolulu, HI MSA.....	37.0	57.3	84.3	92.7	96.9	99.5	103.7	107.7	109.8	114.3
Houston-Galveston-Brazoria, TX CMSA.....	35.8	56.2	83.9	91.9	96.4	99.2	104.4	105.1	107.4	112.1
Kansas City, MO-KS CMSA.....	40.1	61.5	88.8	95.2	97.6	99.1	103.3	105.9	109.3	112.5
Los Angeles-Anaheim-Riverside, CA CMSA.....	38.5	58.4	85.4	92.3	96.9	100.1	103.1	105.5	108.5	112.9
Miami-Fort Lauderdale, FL CMSA.....	(NA)	84.6	91.3	96.8	98.5	103.8	104.5	107.1	113.5	116.0
Milwaukee, WI PMSA.....	39.2	59.6	87.0	94.9	98.3	99.5	102.1	105.8	107.8	112.2
Minneapolis-St. Paul, MN-WI MSA.....	36.6	58.3	87.7	92.9	96.6	99.4	103.9	106.4	108.1	113.8
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA.....	39.5	60.2	85.1	92.8	97.4	98.9	103.7	107.3	112.2	116.6
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA.....	38.5	59.7	86.1	92.6	97.7	99.9	102.4	105.0	107.7	112.0
Pittsburgh-Beaver Valley, PA CMSA.....	38.7	60.9	87.3	94.1	98.1	101.1	106.8	101.8	104.7	109.3
Portland-Vancouver, OR-WA CMSA.....	37.9	57.5	85.5	92.2	97.1	99.6	103.3	105.8	108.2	111.4
San Diego, CA MSA.....	36.9	56.5	83.8	90.0	94.7	100.4	105.0	107.1	111.1	115.8
San Francisco-Oakland-San Jose, CA CMSA.....	38.1	58.0	84.8	91.0	96.9	99.1	103.9	106.0	109.5	114.0
Seattle-Tacoma, WA CMSA.....	39.4	58.9	84.5	91.6	98.5	100.0	101.5	103.2	105.7	112.2
St. Louis-East St. Louis, MO-IL CMSA.....	39.8	60.2	87.1	93.6	97.1	99.7	103.2	105.7	108.8	114.1
Washington, DC-MD-VA MSA.....	39.1	60.3	86.1	92.7	97.2	99.8	103.0	106.1	109.8	113.6

NA Not available.

Source: U.S. Bureau of Labor Statistics, *CPI Detailed Report*, January issues.

NO. 771. WEEKLY FOOD COST FOR FAMILIES, BY TYPE OF FAMILY: 1975 TO 1988

[In dollars. As of December, except as indicated. Based on moderate-cost food plan; assumes all meals are eaten at home or taken from home]

URBAN FAMILY TYPE	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	
										Jan.	May
Couple, 20-54 years old ¹	37.10	52.00	53.40	54.80	54.70	56.50	58.30	60.40	63.50	63.90	64.20
Couple, 55 years and over ¹	32.40	45.90	47.10	46.10	52.00	53.90	55.70	57.80	60.70	61.40	61.70
Couple with children:											
1 child, 1-5 years old.....	44.90	62.90	64.70	66.00	66.90	69.20	71.30	73.90	77.50	78.10	78.80
1 child, 15-18 years old.....	53.50	74.80	76.80	78.50	77.80	80.50	83.00	85.80	90.10	90.80	91.40
2 children, 1-5 years old.....	51.80	72.60	74.70	76.20	77.80	80.50	82.90	85.80	90.00	90.70	91.40
2 children, 6-11 years old.....	63.00	88.10	90.70	92.80	93.50	97.10	99.80	103.30	108.30	109.20	110.00
2 children, 12-18 years old.....	67.20	93.80	98.50	98.60	98.60	101.80	104.60	106.20	113.50	114.80	115.20

¹ Beginning 1983, costs based on revised food plans with age groups 20-50 years old and 51 years old and over.

Source: U.S. Dept. of Agriculture, Human Nutrition Information Service, *News*, monthly.

NO. 772. SELECTED AGRICULTURAL COMMODITY PRICES RECEIVED BY FARMERS: 1982 TO 1987

[Minus sign (-) indicates decrease]

COMMODITY	Unit	PRICE						PERCENT CHANGE				
		1982	1983	1984	1985	1986	1987	1982-1983	1983-1984	1984-1985	1985-1986	1986-1987
Beef.....	Dol. per 100 lb.	56.70	55.50	57.30	53.70	52.60	61.10	-2.1	3.2	-6.3	-2.0	16.2
Broilers.....	Cents per lb.	26.9	28.8	33.7	30.1	34.5	28.7	6.3	17.8	-10.7	14.6	-16.8
Calves.....	Dol. per 100 lb.	59.80	61.70	59.90	62.10	61.10	78.50	3.2	-2.9	3.7	-1.6	28.5
Eggs.....	Cents per doz.	59.5	61.1	72.3	57.1	81.8	54.9	2.7	18.3	-21.0	7.9	-10.9
Hogs and pigs.....	Dol. per 100 lb.	52.30	46.80	47.10	44.00	49.30	51.20	-10.5	.6	-6.8	12.0	3.9
Rice, rough ¹	Dol. per 100 lb.	7.81	8.57	8.04	6.53	3.75	7.50	8.3	-6.2	-18.8	-43.4	100.0
Sheep and lambs.....	Dol. per 100 lb.	43.80	44.10	49.40	57.90	59.80	68.20	1.1	12.0	17.2	3.3	14.0
Turkeys.....	Cents per lb.	39.5	38.0	45.9	49.1	47.1	34.8	-3.9	28.7	-4	-4.1	-26.1
Wheat ¹	Dol. per bu.	3.45	3.51	3.39	3.08	2.42	2.85	1.7	-3.4	-9.1	-21.4	5.4
Whole milk ²	Cents per qt.	48.0	48.4	49.2	48.7	48.4	48.6	.8	1.7	-1.0	-.6	.4

¹ Marketing year average price. ² Sold to consumers.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Field Crops* (Statistical Bulletin 708); *Agricultural Statistics*, annual; and *Agricultural Outlook*, monthly. Also, *Meat Animals—Production, Disposition, and Income*, annual; and annual livestock summaries. *Milk Production, Disposition, and Income*, annual; and *Poultry—Production, Disposition, and Income*; and *Turkeys*.

Prices

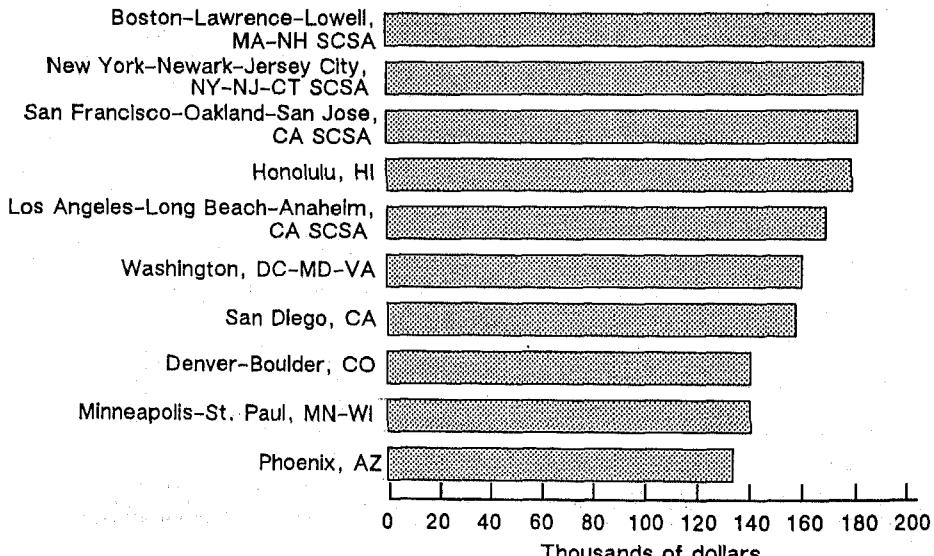
No. 773. MEDIAN PURCHASE PRICE OF EXISTING ONE-FAMILY HOUSES: 1980 TO 1987

[In thousands of dollars, except percent. Represents SMSA unless specified; see Appendix II. Minus sign (–) indicates decrease]

METROPOLITAN AREA	PRICE							AVERAGE ANNUAL PERCENT CHANGE		
	1980	1982	1983	1984	1985	1986	1987	1980-1985	1985-1986	1986-1987
Atlanta, GA.....	81.8	86.0	97.5	98.3	106.7	119.8	131.1	5.5	12.3	9.4
Baltimore, MD.....	69.5	76.8	79.8	84.5	101.4	123.7	126.4	7.9	22.0	1.4
Boston-Lawrence-Lowell, MA-NH SCSA.....	70.5	77.5	91.4	102.5	127.3	153.4	166.2	12.6	20.5	21.4
Chicago-Gary, IL-IN SCSA.....	78.0	87.6	92.8	90.7	98.7	113.3	118.9	4.8	14.8	3.2
Cleveland-Akron-Lorain, OH SCSA.....	63.8	75.1	73.3	73.2	73.8	84.4	89.4	3.0	14.4	5.9
Columbus, OH.....	65.7	78.8	77.7	72.7	79.4	85.4	92.6	3.9	7.2	8.8
Dallas, TX.....	89.4	97.2	104.5	109.2	124.1	130.5	128.5	6.8	5.2	-1.5
Denver-Boulder, CO.....	80.0	85.4	119.3	115.3	191.6	152.7	139.8	10.5	16.0	-8.4
Detroit-Ann Arbor, MI SCSA.....	67.9	85.0	73.8	75.3	78.4	82.0	83.6	2.9	4.8	14.1
Greensboro-Winston-Salem-High Point, NC.....	63.6	70.1	74.6	70.8	82.4	86.7	110.0	5.3	7.8	24.0
Honolulu, HI.....	118.3	129.1	135.0	138.7	150.6	161.6	177.8	4.8	7.3	9.9
Houston-Galveston, TX SCSA.....	85.7	90.2	101.8	94.8	101.1	114.2	108.8	3.4	13.0	-6.5
Indianapolis, IN.....	60.8	70.0	71.2	67.2	71.4	81.7	94.7	3.4	14.4	15.9
Kansas City, MO-KS.....	64.2	80.1	78.0	80.3	90.5	97.6	105.8	7.1	7.8	8.4
Los Angeles-Long Beach-Anaheim, CA SCSA.....	110.7	122.3	133.4	132.0	142.9	158.1	167.7	5.2	9.2	7.4
Louisville, KY-IN.....	58.5	59.1	61.9	61.1	70.0	73.1	85.6	3.7	4.4	17.1
Miami-Fort Lauderdale, FL SCSA.....	75.3	89.0	80.6	84.7	89.3	99.3	103.9	3.5	11.2	4.6
Milwaukee-Racine, WI SCSA.....	84.9	85.7	80.8	82.2	83.7	88.6	95.7	-3.9	5.9	8.0
Minneapolis-St. Paul, MN-WI.....	80.9	95.8	95.3	103.4	115.4	132.9	139.4	7.4	15.2	4.8
New York-Newark-Jersey City, NY-NJ-CT SCSA.....	93.8	102.7	114.6	126.5	139.4	158.0	181.8	8.3	13.3	15.1
Philadelphia-Wilmington-Trenton, PA-DE-NJ-MD SCSA.....	62.6	65.0	71.7	75.9	81.4	97.7	113.7	5.4	20.0	16.4
Phoenix, AZ.....	92.7	91.3	97.2	101.4	116.8	130.3	132.9	4.7	11.7	2.0
Pittsburgh, PA.....	64.6	66.8	68.0	67.7	72.5	81.9	82.8	2.3	13.0	1.1
Portland, OR-WA.....	75.6	95.5	81.6	86.9	92.6	110.8	108.5	4.2	19.7	-2.1
Rochester, NY.....	57.5	67.8	72.1	73.8	84.2	91.3	79.6	7.9	8.4	-12.8
St. Louis, MO-IL.....	56.5	63.9	71.0	73.2	75.7	81.4	92.1	6.0	7.5	11.7
Salt Lake City-Ogden, UT.....	73.2	88.5	78.0	92.2	92.9	120.9	121.0	4.9	30.1	.1
San Diego, CA.....	105.7	118.0	124.6	122.9	141.7	148.9	158.7	6.0	5.1	5.2
San Francisco-Oakland-San Jose, CA SCSA.....	122.9	137.6	144.2	143.4	154.9	167.5	179.9	4.7	8.1	7.4
Seattle-Tacoma, WA SCSA.....	82.2	94.8	96.1	97.8	102.7	123.5	127.7	4.6	20.3	3.4
Tampa-St. Petersburg, FL.....	64.0	83.8	76.4	78.1	79.1	88.1	100.3	4.3	11.4	13.8
Washington, DC-MD-VA.....	100.1	126.4	130.0	131.7	152.6	156.6	159.5	8.8	2.6	1.9

Source: Federal Home Loan Bank Board, *Savings and Home Financing Source Book*, annual.

Figure 15.3
Median Purchase Price of Existing One-Family Houses
in Ten Most Expensive Metropolitan Areas: 1987



Source: Chart prepared by U.S. Bureau of the Census. For data see tables 773.

Rent, Fuels and Utilities, and Energy Prices

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NO. 774. CONSUMER PRICE INDEXES (CPI) OF HOMEOWNERS EQUIVALENT RENT IN SELECTED AREAS: 1983 TO 1987

[1982-84 = 100. Annual averages of monthly figures, except as indicated. Minus sign (—) indicates decrease. See Appendix II]

AREA	1983	1984	1985	1986	1987	PERCENT CHANGE			
						1983-84	1984-85	1985-86	1986-87
Anchorage, AK MSA.....	103.8	108.4	107.3	105.2	98.3	4.6	-1.0	-2.0	-8.5
Atlanta, GA MSA.....	101.7	108.0	114.1	121.5	126.4	4.2	7.6	6.5	4.0
Baltimore, MD MSA.....	102.7	108.8	115.3	122.8	127.6	5.9	6.0	6.5	3.9
Boston-Lawrence-Salem, MA-NH CMSA.....	105.7	111.4	119.6	127.7	137.4	5.4	7.4	6.8	7.6
Buffalo-Niagara Falls, NY CMSA.....	104.2	110.5	120.5	125.6	131.7	6.0	9.2	4.2	4.9
Chicago-Gary-Lake County, IL-IN-WI CMSA.....	102.0	107.8	114.5	119.9	125.3	5.7	6.2	4.7	4.5
Cincinnati-Hamilton, OH-KY-IN CMSA.....	101.8	105.0	110.0	113.7	119.2	3.9	3.9	3.4	4.8
Cleveland-Akron-Lorain, OH CMSA.....	102.3	105.4	111.0	116.1	120.3	3.0	5.3	4.6	3.6
Dallas-Fort Worth, TX CMSA.....	104.8	108.9	113.8	118.7	119.1	4.0	4.6	4.3	.3
Denver-Boulder, CO CMSA.....	102.8	107.0	110.5	111.8	113.2	4.3	3.3	1.2	1.3
Detroit-Ann Arbor, MI CMSA.....	100.7	103.4	108.2	115.2	121.2	2.7	4.6	6.5	5.2
Honolulu, HI MSA.....	100.6	105.8	110.4	115.8	125.0	5.2	4.3	4.9	7.9
Houston-Galveston-Brazoria, TX CMSA.....	98.4	95.1	93.9	93.8	91.8	-3.4	-1.3	-1	-2.1
Kansas City, MO-KS CMSA.....	102.7	107.7	112.1	115.6	118.6	4.9	4.1	3.1	2.6
Los Angeles-Anaheim-Riverside, CA CMSA.....	103.1	110.1	117.1	125.5	133.5	6.8	6.4	7.2	6.4
Miami-Fort Lauderdale, FL CMSA.....	102.8	103.7	108.4	109.0	111.3	1.1	2.6	2.4	2.1
Milwaukee, WI PMSA.....	103.6	108.0	114.5	120.1	129.1	5.2	5.9	4.1	7.5
Minneapolis-St. Paul, MN-WI MSA.....	102.4	105.6	112.0	117.3	122.2	3.1	6.1	4.7	4.2
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA.....	102.7	108.3	115.0	124.4	133.4	6.0	5.6	8.2	7.2
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA.....	101.7	107.7	117.8	126.3	133.7	5.9	9.4	6.4	6.7
Pittsburgh-Beaver Valley, PA CMSA.....	102.6	106.4	108.1	114.2	117.9	3.3	2.9	4.7	3.2
Portland-Vancouver, OR-WA CMSA.....	101.2	103.1	107.5	112.0	116.0	1.9	4.3	4.2	3.6
San Diego, CA MSA.....	105.3	114.9	129.6	139.7	144.3	9.1	12.8	7.8	3.3
San Francisco-Oakland-San Jose, CA CMSA.....	107.0	114.9	123.5	134.9	140.5	7.4	7.5	9.2	4.2
Seattle-Tacoma, WA CMSA.....	101.1	104.5	108.2	112.8	115.3	3.4	3.5	4.1	2.4
St. Louis-East St. Louis, MO-IL CMSA.....	102.8	108.8	118.8	120.8	125.2	5.7	7.4	3.4	3.6
Washington, DC-MD-VA MSA.....	101.8	107.1	113.5	119.9	124.9	5.2	6.0	5.6	4.2

NO. 775. CONSUMER PRICE INDEX—PERCENT CHANGE IN FUELS AND UTILITIES: 1970 TO 1987

[1982-84 = 100. Represents all urban consumers. Minus sign (—) indicates decrease. See text for section 15]

ITEM	1970-76	1975-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87
Household fuels and other utilities	9.3	9.3	16.4	14.8	9.8	5.6	4.6	1.8	-2.3	-1.1
Household fuels.....	11.3	11.7	22.0	16.8	9.6	6.1	3.5	.5	-5.1	-1.9
Fuel oil and other household fuel commodities.....	16.5	14.4	38.0	21.5	-1.1	-6.0	2.3	-3.5	-19.1	.4
Fuel oil.....	16.2	16.0	39.0	22.3	-2.1	-8.1	2.1	-4.0	-21.7	2.3
Gas (piped) and electricity.....	9.6	11.1	17.0	14.7	13.8	8.9	3.8	1.6	-1.3	-1.8
Electricity.....	9.5	7.0	15.5	15.0	9.9	3.2	6.5	3.4	1.4	-4
Utility (piped) gas.....	9.7	15.4	19.2	14.0	19.9	16.8	.8	-7	-4.9	-4.6
Telephone services.....	4.1	1.4	2.5	8.9	10.2	6.4	8.4	3.9	4.9	-.6

NO. 776. AVERAGE PRICE OF ENERGY IN SELECTED AREAS: 1988

[In dollars per unit shown. One therm contains approximately 100 cubic feet of natural gas. As of January. See Appendix II]

CITY/MBA	Utility (piped) gas (100 therms)	Electricity (500 kWh)	Fuel oil No. 2 (gallon)	GASOLINE			
				All types 1	Leaded regular	Unleaded regular	Unleaded premium
U.S. city average.....	54.51	40.20	.890	.947	.881	.833	1.095
Baltimore, MD MSA.....	51.34	37.15	.924	1.007	.955	.868	1.136
Boston-Lawrence-Salem, MA-NH CMSA.....	63.29	45.03	.914	1.010	.929	.979	1.134
Chicago-Gary-Lake County, IL-IN-WI CMSA.....	41.24	42.70	.910	1.011	.947	.989	1.161
Cleveland-Akron-Lorain, OH CMSA.....	46.94	46.29	.881	.950	.873	.926	1.140
Dallas-Fort Worth, TX CMSA.....	49.41	39.43	(NA)	.913	.875	.897	1.034
Detroit-Arn Arbor, MI CMSA.....	52.81	42.18	.870	.944	.879	.952	1.073
Houston-Galveston-Brazoria, TX CMSA.....	41.89	38.07	(NA)	.892	.892	.859	1.049
Los Angeles-Anaheim-Riverside, CA CMSA.....	57.41	44.53	(NA)	.893	.869	.866	1.071
Miami-Fort Lauderdale, FL CMSA.....	63.28	47.48	(NA)	1.035	(NA)	.977	1.098
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA.....	84.16	58.18	.944	1.031	.928	.971	1.151
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA.....	65.29	51.43	.905	.942	.898	.907	1.091
Pittsburgh-Beaver Valley, PA CMSA.....	54.17	42.69	.767	.912	.884	.895	1.069
St. Louis-East St. Louis, MO-IL CMSA.....	50.85	38.67	.824	.933	.880	.914	1.116
San Francisco-Oakland-San Jose, CA CMSA.....	44.18	43.88	(NA)	.975	.915	.976	1.114
Washington, DC-MD-VA MSA.....	82.80	38.40	.988	1.084	.938	1.031	1.287

NA Not available. 1 Includes types of gasoline not shown separately.

Source of tables 774-776: U.S. Bureau of Labor Statistics, *CPI Detailed Report*, January issues.

NO. 777. AVERAGE MONTHLY RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL BILLS FOR ELECTRICITY: 1980 TO 1987

[In dollars. As of January 1. Represents composite averages, derived using census data; for 1980 data, the 1970 census was used; thereafter, 1980 Census was used. Residential, for cities of 2,500 or more population; commercial and industrial, for 455 large cities in United States and Puerto Rico. KW=Kilowatts; kWh=Kilowatt-hours. See source for coverage detail]

ITEM	1980	1985	1986	1987, prev.	ITEM	1980	1985	1986	1987, prev.
RESIDENTIAL									
Average bill, dollars:									
500 kWh.....	27.80	41.86	42.54	40.88	COMMERCIAL—Con.				
750 kWh.....	36.94	57.86	58.78	56.78	Average bill, cents per kWh:				
1,000 kWh.....	48.79	76.37	77.50	74.57	6 KW, 750 kWh.....	7.5	10.7	10.5	10.1
Average bill, cents per kWh:					12 KW, 1,500 kWh.....	7.6	10.9	10.8	10.4
500 kWh.....	5.6	8.4	8.6	8.2	30 KW, 6,000 kWh.....	6.4	9.6	9.4	8.8
750 kWh.....	4.9	7.7	7.8	7.6	40 KW, 10,000 kWh.....	5.9	8.9	8.7	8.2
1,000 kWh.....	4.9	7.6	7.8	7.5	INDUSTRIAL				
COMMERCIAL					Average bill, dollars:				
Average bill, dollars:									
6 KW, 750 kWh.....	57	80	78	76	150 KW, 30,000 kWh.....	1,757	2,792	2,656	2,572
12 KW, 1,500 kWh.....	114	183	163	155	300 KW, 60,000 kWh.....	3,431	5,353	5,208	5,046
30 KW, 6,000 kWh.....	385	576	561	530	1,000 KW, 200,000 kWh.....	10,910	17,012	16,652	16,226
40 KW, 10,000 kWh.....	590	893	869	820	Average bill, cents per kWh:				

NO. 778. NET MONTHLY RESIDENTIAL ELECTRIC BILLS (LOWEST AND HIGHEST) FOR 500 KILOWATT-HOURS USE, 1970 TO 1987, AND BY STATE, 1987

[In dollars. Based on rates as of January 1 for communities of 2,500 inhabitants or more. Consumption for lighting, appliances, refrigeration and cooking. Does not include domestic water heating usage which in 1983 represented 18 percent of total U.S. households. For composition of regions, see fig. 1, Inside front cover]

YEAR, REGION, DIVISION, AND STATE	Low- est bill	High- est bill	DIVISION AND STATE	Low- est bill	High- est bill	DIVISION AND STATE	Low- est bill	High- est bill
1970.....	5.00	25.00	E. No. Cent.: OH.....	23.59	52.09	E. So. Cent.: KY.....	24.33	40.42
1975.....	5.10	41.14	IN.....	27.81	54.66	TN.....	25.50	32.10
1980.....	5.84	64.47	IL.....	25.28	49.71	AL.....	25.57	38.92
1985.....	9.49	77.88	MI.....	20.50	50.55	MS.....	25.87	46.77
1986.....	8.90	79.37	WI.....	21.35	35.95	W. So. Cent.:		
1987, U.S. Region:	8.90	64.60	W. No. Cent.: MN.....	14.95	50.23	AR.....	22.33	50.58
Northeast.....	10.53	59.74	IA.....	22.00	52.11	LA.....	17.88	56.45
Midwest.....	16.75	84.60	MO.....	18.23	48.30	OK.....	28.00	54.66
South.....	16.00	56.45	ND.....	20.62	42.07	TX.....	16.41	48.80
West.....	8.90	60.32	SD.....	16.75	51.85	Mt.:		
N. Eng.:			NE.....	23.30	41.22	MT.....	20.50	40.92
ME.....	28.25	44.74	KS.....	25.45	46.80	ID.....	19.40	29.36
NH.....	37.44	52.61	So. Atl.: DE.....	36.80	51.96	WY.....	21.50	48.53
VT.....	27.45	59.74	MD.....	31.21	44.84	NM.....	29.65	55.85
MA.....	31.34	53.82	DC.....	29.24	29.24	AZ.....	29.65	54.66
RI.....	42.82	48.28	VA.....	26.63	40.25	UT.....	23.72	47.82
CT.....	35.15	53.58	WV.....	27.58	45.07	NV.....	20.00	46.60
Md. Atl.:			NC.....	31.54	51.98	Pac.:		
NY.....	10.53	55.64	SC.....	29.57	44.03	WA.....	8.90	29.40
NJ.....	41.80	55.52	GA.....	16.00	48.23	OR.....	14.40	27.40
PA.....	18.00	58.56	FL.....	23.54	56.41	CA.....	23.70	59.97

Source of tables 777 and 778: Through 1975, U.S. Federal Power Commission, *Typical Electric Bills*, annual; thereafter, U.S. Energy Information Administration, *Typical Electric Bills*, annual.

NO. 779. AVERAGE PRICES OF SELECTED FUELS AND ELECTRICITY: 1973 TO 1987

[In dollars per unit, except electricity, in cents per kWh. Represents price to end-users, except as noted]

ITEM	Unit ¹	1973	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
Crude oil, composite ²	Barrel.....	4.15	10.38	17.72	28.07	35.24	31.87	28.99	28.63	26.75	14.55	17.91
Motor gasoline ³	Gallon.....	.39	.57	.86	1.19	1.31	1.22	1.16	1.13	1.12	.86	.90
Leaded regular.....	Gallon.....	(NA)	(NA)	.90	1.25	1.38	1.30	1.24	1.21	1.20	.93	.95
Unleaded regular.....	Gallon.....	(NA)	(NA)	(NA)	(NA)	1.47	1.42	1.38	1.37	1.34	1.09	1.09
Unleaded premium.....	Gallon.....	(NA)	(NA)	.52	.78	.81	.81	.82	.82	.85	.56	.58
No. 2 heating oil.....	Gallon.....	(NA)	(NA)	.44	.61	.76	.68	.65	.65	.61	.34	.42
No. 2 diesel fuel.....	Gallon.....	(NA)	(NA)	.59	.82	1.00	.84	.83	.82	.79	.48	.55
Residual fuel oil.....	Gallon.....	(NA)	(NA)	.44	.61	.76	.68	.65	.65	.61	.34	.42
Natural gas, residential.....	1,000 cu. ft.....	1.29	1.71	2.98	3.68	4.29	5.17	6.06	6.12	6.12	5.83	5.56
Electricity, residential.....	kWh.....	2.54	3.51	4.64	5.36	6.20	6.86	7.18	7.54	7.79	7.41	7.41

NA Not available.

¹ See headnote.

² Refiner acquisition cost.

³ Average, all service.

Source: U.S. Energy Information Administration, *Monthly Energy Review*.

Motor Gasoline Sales Price

481

No. 780. SALES PRICE OF MOTOR GASOLINE, BY GRADE AND STATE: 1986 TO 1988

[In cents per gallon. As of March. Represents all refinery and gas plant operators' sales through company-operated retail outlets.
Gasoline prices exclude excise taxes.]

STATE	Gasoline excise taxes 1987 ¹	AVERAGE, ALL GRADES			LEADED REGULAR			UNLEADED REGULAR			PREMIUM		
		1986	1987	1988	1986	1987	1988	1986	1987	1988	1986	1987	1988
United States.....	14.5	66.6	64.0	63.8	61.3	60.4	59.6	66.6	62.6	61.5	77.9	74.5	74.5
Alabama.....	211.0	66.7	66.2	62.6	62.9	60.6	58.8	70.3	66.3	61.8	(NA)	75.3	70.8
Alaska.....	8.0	116.6	85.3	(NA)	116.7	89.0	(NA)	116.5	82.3	(NA)	91.3	95.0	
Arizona.....	16.0	75.8	72.4	63.2	69.8	68.3	59.5	77.5	72.2	61.8	83.3	84.0	76.8
Arkansas.....	13.5	62.4	60.2	62.2	59.5	56.9	57.9	63.6	60.6	60.8	71.2	67.9	72.0
California.....	29.0	70.6	68.8	63.6	63.2	63.5	58.0	71.2	67.5	62.0	86.6	81.5	75.7
Colorado.....	18.0	58.6	62.2	60.2	54.6	57.5	57.6	60.6	63.6	59.8	66.5	72.4	69.4
Connecticut.....	19.0	82.5	68.6	72.0	70.5	61.5	64.6	82.1	65.9	68.8	91.7	77.0	80.0
Delaware.....	16.0	67.3	64.2	62.3	62.5	59.8	59.5	65.0	61.7	58.8	80.2	73.0	72.0
District of Columbia.....	15.5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Florida.....	24.0	71.9	62.5	65.6	63.5	56.8	61.4	71.7	61.0	62.4	84.0	74.6	74.8
Georgia.....	7.5	67.8	64.4	61.8	59.8	56.4	55.0	67.5	62.4	58.3	79.9	77.0	74.0
Hawaii.....	211.0	94.5	83.6	87.4	86.2	74.4	79.5	97.3	85.0	84.6	107.2	(D)	99.3
Idaho.....	14.5	70.0	62.6	64.7	68.8	60.8	63.8	70.7	62.8	64.0	94.9	80.7	77.3
Illinois.....	213.0	63.9	66.1	64.1	58.8	67.4	61.0	63.5	62.7	61.0	68.8	75.2	75.5
Indiana.....	14.0	57.6	61.5	61.2	54.8	58.9	60.8	57.2	61.0	59.1	62.6	66.7	66.5
Iowa.....	16.0	81.5	63.8	62.3	60.1	61.9	61.2	61.9	64.9	61.9	66.1	67.3	69.6
Kansas.....	11.0	62.2	62.7	63.1	61.4	60.6	61.9	61.4	62.7	62.8	65.9	69.1	70.4
Kentucky.....	15.0	63.0	63.4	62.9	56.6	58.9	59.5	64.3	62.2	60.7	72.4	73.2	71.8
Louisiana.....	16.0	89.4	61.3	60.6	62.1	56.3	54.8	68.6	59.3	57.4	80.5	70.3	70.9
Maine.....	14.0	79.1	71.4	71.6	75.0	66.5	68.2	78.5	69.8	69.7	89.7	81.4	81.3
Maryland.....	18.5	72.3	65.3	66.7	67.8	60.7	63.7	71.0	63.2	63.4	82.7	73.8	74.0
Massachusetts.....	11.0	79.1	(NA)	74.5	71.7	59.8	64.9	77.1	(NA)	70.4	90.1	76.9	83.6
Michigan.....	15.0	62.0	59.9	60.2	57.8	57.6	59.8	62.3	58.9	58.2	71.7	70.6	68.5
Minnesota.....	17.0	67.3	62.9	65.0	64.0	60.5	63.8	68.8	63.3	64.7	72.4	68.6	70.4
Mississippi.....	215.0	68.0	67.6	65.3	62.9	63.0	59.1	68.8	67.9	64.3	79.0	75.5	73.8
Missouri.....	11.0	59.7	62.6	61.6	57.1	59.7	58.2	60.4	62.3	60.1	71.2	71.9	72.1
Montana.....	20.0	69.1	61.9	64.8	63.2	61.5	64.4	62.7	61.9	64.9	64.4	64.6	66.1
Nebraska.....	17.6	62.5	67.7	62.1	60.8	67.4	61.3	63.4	66.9	62.1	65.4	66.7	65.6
Nevada.....	214.3	73.4	61.4	59.4	68.6	57.8	55.9	75.7	62.1	58.7	87.1	71.4	69.9
New Hampshire.....	14.0	80.0	70.1	72.1	73.8	64.3	65.5	79.0	67.8	68.6	89.8	79.6	83.8
New Jersey.....	8.0	77.6	85.7	71.7	70.1	58.8	63.8	74.4	61.6	66.1	88.0	76.1	82.9
New Mexico.....	14.0	74.4	64.6	66.6	72.9	61.0	64.8	74.7	65.3	66.4	87.3	74.4	75.8
New York.....	28.0	73.3	65.9	68.9	68.8	61.9	65.1	72.1	63.5	65.2	85.7	76.0	79.2
North Carolina.....	15.5	64.6	64.5	64.2	57.1	58.0	57.1	64.3	63.0	61.5	77.8	74.7	75.0
North Dakota.....	17.0	70.9	66.6	66.8	73.7	66.0	66.6	70.7	67.1	66.8	64.6	70.0	70.0
Ohio.....	14.7	62.3	65.7	62.6	56.3	60.7	58.5	61.5	63.6	59.5	77.8	78.6	76.1
Oklahoma.....	16.0	54.3	61.3	60.4	52.0	58.4	58.1	54.6	60.8	59.6	60.9	69.0	67.7
Oregon.....	212.0	71.6	60.1	64.3	68.4	57.6	61.5	73.4	60.3	63.8	84.2	72.4	77.0
Pennsylvania.....	12.0	68.3	62.6	62.8	64.7	58.2	59.0	66.7	59.9	58.7	78.7	74.7	74.6
Rhode Island.....	13.0	74.9	68.1	69.5	68.8	61.0	62.5	72.5	64.6	65.3	82.1	74.6	79.8
South Carolina.....	15.0	60.6	63.0	64.0	54.6	57.6	57.9	60.9	62.5	62.0	71.8	73.0	75.7
South Dakota.....	213.0	69.8	63.5	62.7	68.4	63.8	62.9	70.8	63.0	62.4	77.2	74.3	69.3
Tennessee.....	217.0	64.3	61.6	59.8	57.5	56.1	54.9	65.5	60.5	57.8	76.3	72.3	71.2
Texas.....	15.0	68.7	62.0	63.0	62.6	58.0	57.7	67.9	60.5	61.2	81.6	72.1	73.3
Utah.....	19.0	58.8	61.7	64.0	57.5	58.7	62.1	59.3	62.0	63.6	65.7	70.4	71.7
Vermont.....	13.0	79.7	73.8	76.3	73.3	67.0	70.9	79.8	72.1	73.4	90.2	84.1	87.3
Virginia.....	217.5	75.1	65.5	68.1	67.3	59.2	61.3	75.4	62.8	66.0	86.1	76.7	77.3
Washington.....	18.0	67.3	61.4	65.0	61.8	57.7	61.4	69.3	61.1	63.5	80.9	73.3	75.9
West Virginia.....	10.5	70.1	68.5	69.8	65.1	63.7	65.6	69.9	67.3	67.2	83.0	78.1	79.7
Wisconsin.....	20.0	62.0	62.2	60.3	60.6	60.3	59.8	61.9	61.6	58.7	71.3	70.6	68.0
Wyoming.....	8.0	75.1	66.2	64.7	70.8	65.1	63.2	70.8	65.5	65.2	(D)	79.0	71.4

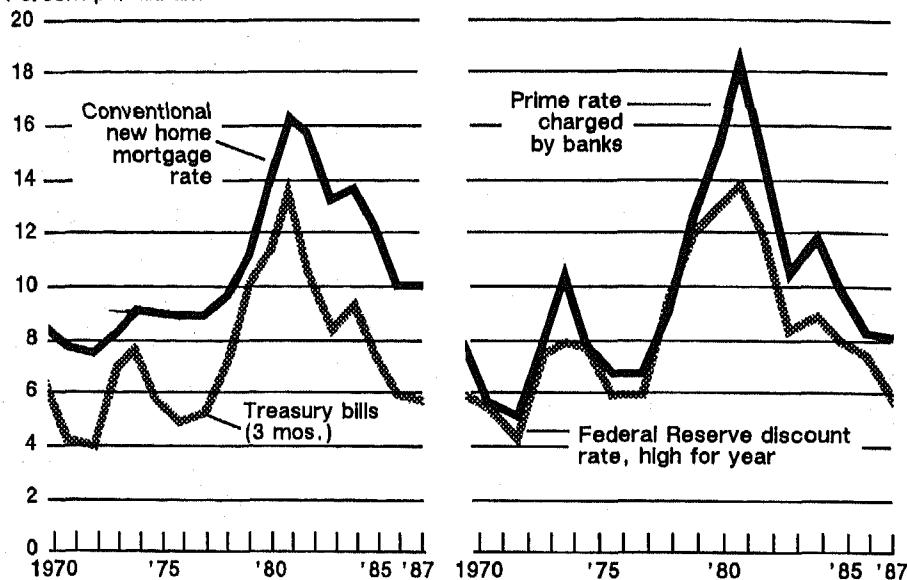
D Withheld to avoid disclosure of data. NA Not available. X Not applicable. ¹ Source: U.S. Advisory Committee on Intergovernmental Relations, *Significant Features of Fiscal Federalism*, 1988 Edition, Vol. I, based on CCH, *State Tax Reporter*.

² Plus local taxes, if any.

Source: Except as noted, U.S. Energy Information Administration, *Petroleum Marketing Monthly*, March 1988.

Figure 16.1
Interest Rates: 1970 to 1987

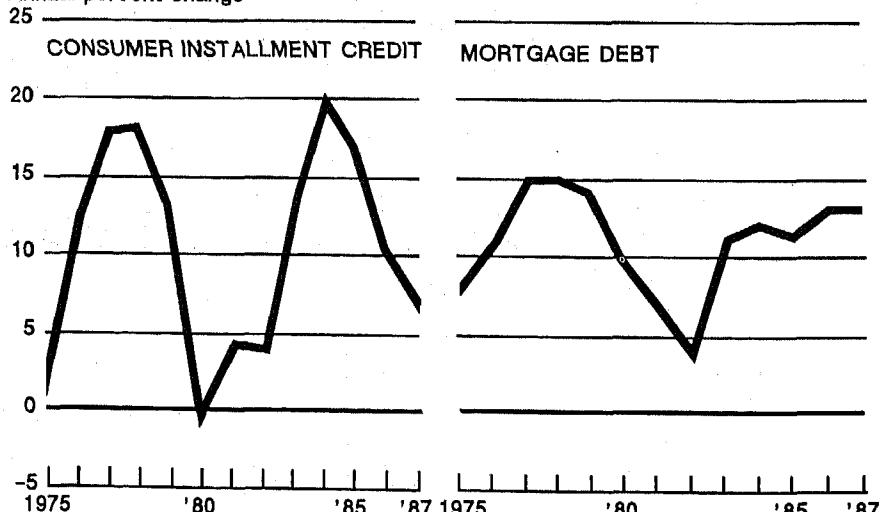
Percent per annum



Source: Chart prepared by U.S. Bureau of the Census. For data see table 823.

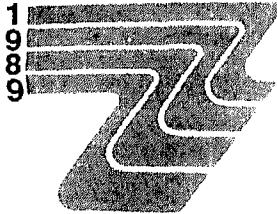
Figure 16.2
Consumer Installment Credit Outstanding and Mortgage Debt Outstanding—Annual Percent Changes: 1975 to 1987

Annual percent change



Note: Represents change in amounts outstanding.

Source: Chart prepared by U.S. Bureau of the Census. For data see tables 808 and 814.



Section 16

Banking, Finance, and Insurance

This section presents data on the Nation's finances, various types of financial institutions, money and credit, securities, and insurance. The primary sources of these data are publications of several departments of the Federal Government, especially the Treasury Department, and independent agencies such as the Federal Deposit Insurance Corporation, the Federal Reserve System, and the Securities and Exchange Commission. National data on insurance are available primarily from private organizations, such as the American Council of Life Insurance.

Flow of funds.—The flow of funds accounts of the Federal Reserve System (see tables 784 to 788) bring together statistics on all of the major forms of financial transactions and financial claims to present an economy-wide view of asset and liability relationships. In flow form, the accounts relate borrowing and lending to one another and to the nonfinancial activities that generate income and production. Each claim outstanding is included simultaneously as an asset of the lender and as a liability of the debtor. The accounts also indicate the balance between asset totals and liability totals over the economy as a whole. Several publications of the Board of Governors of the Federal Reserve System contain information on the flow of funds accounts: Summary data on flows, in the *Federal Reserve Bulletin*, *Flow of Funds Accounts* (quarterly), and *Annual Statistical Digest*; and concepts and organization of the accounts, in *Introduction to Flow of Funds* (June 1980).

Banking system.—Banks in this country are organized under the laws of both the States and the Federal Government and are regulated by several bank supervisory agencies. State-chartered banks are supervised by officials of the respective States. National banks are supervised by the Comptroller of the Currency. *Reports of Condition* have been collected from national banks since 1863. Summaries of these reports are published in the Comptroller's *Annual Report*, which also presents data on the structure of the national banking system.

The Federal Reserve System was established in 1913 to exercise central banking functions, some of which are shared with the U.S. Treasury. It includes national banks and such State banks as voluntarily join the System. Statements of State bank members are consolidated by the Board of Governors of the Federal Reserve System with data for national banks collected by the Comptroller of the Currency into totals for all member banks of the System. Balance sheet data for member banks and other commercial banks are published quarterly in the *Federal Reserve Bulletin*.

The Federal Deposit Insurance Corporation (FDIC), established in 1933, insures each depositor up to \$100,000 currently in banks that are members of the Federal Reserve System and in such nonmember banks as join the insurance fund. Major item balance sheets for all commercial banks are published monthly in the *Federal Reserve Bulletin*.

Savings institutions and other credit agencies.—Savings institutions, insurance companies, finance companies dealing primarily in installment sales financing, credit unions, and personal loan companies represent important sources of funds for the credit market. Savings institutions are primarily involved in credit extension in the form of mortgage loans. Statistics on savings institutions are collected by the Federal Home Loan Bank Board. Statistics on loans, investments, cash, etc., of life insurance companies are published principally by the American Council of Life Insurance in its *Life Insurance Fact Book*. Consumer credit data are published currently in the *Federal Reserve Bulletin*.

Federally chartered credit unions are under the supervision of the National Credit Union Administration, established in 1970. State-chartered credit unions are supervised by the respective State supervisory authorities. The Administration publishes comprehensive program and statistical information on all Federal and federally insured State credit unions in the *Annual Report of the National Credit Union Administration*. Deposit insurance (up to \$100,000 per account) is provided to members of all Federal and those State credit unions that are federally-insured by the National Credit Union Share Insurance Fund which was established in 1970. Deposit insurance for State chartered

Banking, Finance, and Insurance

credit unions is also available in some States under private or State-administered insurance programs.

Government corporations and credit agencies make available credit of specified types or to specified groups of private borrowers, either by lending directly or by insuring or guaranteeing loans made by private lending institutions. Data on operations of Government credit agencies, along with other Government corporations, are available in reports of individual agencies; data on their debt outstanding are published in the *Federal Reserve Bulletin*.

Currency.—Currency, including coin and paper money, represents more than one-fourth of all media of exchange in the United States, with most payments made by check. All currency is now issued by the Federal Reserve Banks.

Securities.—The Securities and Exchange Commission (SEC) was established in 1934 to protect the interests of the public and investors against malpractices in the securities and financial markets and to provide the fullest possible disclosure of information regarding securities to the investing public.

Insurance.—Insuring companies, which are regulated by the various States or the District of Columbia, are classified as either life or property. Companies that underwrite accident and health insurance only and those that underwrite accident and health insurance in addition to one or more property lines are included with property insurance. Insuring companies, other than those classified as life, are permitted to underwrite one or more property lines provided they are so licensed and have the necessary capital or surplus.

There are a number of published sources for statistics on the various classes of insurance—life, health, fire, marine, and casualty. Individual States collect data on all insurers operating within their respective jurisdictions, and many of the States publish an annual insurance report giving individual company data and aggregates of certain items for the companies operating within the State. Organizations representing certain classes of insurers publish reports for these classes. Among them are the annual commercial publishers, such as The National Underwriter Company whose *Argus Health Chart* (annual) contains financial and operating data for individual health and accident insurance companies, including Blue Cross and Blue Shield Plans. The American Council of Life Insurance publishes statistics on life insurance purchases, ownership, benefit payments, and assets in its biennial *Life Insurance Fact Book*.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

NO. 781. GROSS NATIONAL PRODUCT IN FINANCE, INSURANCE, AND REAL ESTATE IN CURRENT AND CONSTANT (1982) DOLLARS: 1970 TO 1987

[In billions of dollars, except percent. For definition of gross national product, see text, section 14. Based on 1972 Standard Industrial Classification]

INDUSTRY	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
CURRENT DOLLARS										
Finance, insurance, real estate, total.....	145.8	221.7	400.6	449.3	475.1	536.4	572.8	639.5	708.6	775.4
Percent of gross national product.....	14.4	13.9	14.7	14.7	15.0	15.8	15.2	15.9	16.7	17.1
Banking.....	18.4	25.8	51.1	54.4	59.8	68.1	70.6	78.2	80.8	84.9
Credit agencies other than banks.....	1.7	3.3	6.5	6.5	5.4	10.6	9.8	11.6	16.4	17.0
Security and commodity brokers, and services.....	3.3	5.0	8.7	11.4	13.1	20.7	19.7	24.1	31.6	38.7
Insurance carriers.....	11.6	17.2	37.0	34.7	28.8	36.5	34.9	44.2	61.1	72.7
Insurance agents and brokers, and services.....	4.8	7.8	14.4	15.5	17.0	17.6	20.1	22.4	25.5	28.7
Real estate.....	105.4	161.8	281.5	318.7	342.7	374.2	409.1	446.7	479.4	519.3
Holding and other investment companies.....	.6	.7	1.3	8.1	7.2	8.7	8.5	12.3	14.0	16.2
CONSTANT (1982) DOLLARS										
Finance, insurance, real estate, total.....	320.7	387.8	464.3	474.2	475.1	489.0	508.6	524.3	537.6	559.4
Percent of gross national product.....	13.3	14.4	14.6	14.8	15.0	14.8	14.5	14.5	14.4	14.5
Banking.....	38.2	46.4	58.7	58.9	59.8	60.5	61.0	61.8	62.9	63.2
Credit agencies other than banks.....	3.4	4.1	5.2	5.4	5.4	6.0	6.6	7.0	7.8	8.3
Security and commodity brokers, and services.....	9.1	7.9	10.7	12.1	13.1	14.9	16.1	16.9	18.6	21.3
Insurance carriers.....	21.3	25.3	28.6	28.9	29.8	30.1	31.5	33.5	35.8	37.0
Insurance agents and brokers, and services.....	13.7	18.0	17.3	17.1	17.0	17.4	17.9	20.0	21.9	23.9
Real estate.....	232.2	283.4	339.6	345.3	342.7	352.7	365.3	376.0	380.8	394.8
Holding and other investment companies.....	2.8	4.5	6.3	6.5	7.2	7.4	8.2	9.0	9.8	10.9

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

NO. 782. PERSONS WORKING IN FINANCE, INSURANCE, AND REAL ESTATE INDUSTRIES: 1970 TO 1987

(In thousands. Data represent worker-years of full-time equivalent employment by persons working for wages or salaries and number of active partners and proprietors of unincorporated businesses who devote a majority of their working hours to their unincorporated businesses. Based on 1972 Standard Industrial Classification)

INDUSTRY	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Finance, insurance, real estate, total.....	3,749	4,408	5,481	5,822	5,725	5,909	6,137	6,363	6,651	6,947
Average annual percent change 1.....	4.0	3.3	4.5	2.8	1.8	3.2	3.9	3.7	4.5	4.5
Banking.....	1,010	1,225	1,497	1,554	1,580	1,586	1,600	1,625	1,650	1,657
Credit agencies other than banks.....	350	426	546	563	564	620	688	734	808	867
Security and commodity brokers, and services.....	219	192	259	292	317	380	380	409	451	518
Insurance carriers.....	988	1,053	1,225	1,238	1,236	1,236	1,249	1,276	1,337	1,379
Insurance agents, brokers, and services.....	355	440	553	598	623	628	655	685	719	744
Real estate.....	777	987	1,286	1,269	1,273	1,344	1,407	1,489	1,508	1,564
Holding and other investment companies.....	52	82	115	120	132	135	150	165	180	200

¹ For explanation of average annual percent change, see Guide to Tabular Presentation. For 1970, change from 1965.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

NO. 783. FINANCE, INSURANCE, AND REAL ESTATE—ESTABLISHMENTS, EMPLOYEES, AND PAYROLL: 1980 TO 1986

(Excludes government employees, railroad employees, self-employed persons, etc. For statement on methodology, see Appendix III)

SIC ¹ code	INDUSTRY	ESTABLISHMENTS			EMPLOYEES (1,000)			Pay-roll, 1986 (bil. dol.)
		1980	1985	1986	1980	1985	1986	
(H)	Finance, insurance, real estate.....	420,976	487,750	504,052	5,295	6,004	6,371	151
60	Banking ²	45,184	62,215	54,759	1,508	1,588	1,640	33
601	Federal reserve banks	50	86	85	21	24	25	
602	Commercial and stock savings banks	41,906	47,174	48,448	1,380	1,451	1,498	30
603	Mutual savings banks.....	2,223	2,476	2,597	58	67	72	1
805	Functions closely related to banking	1,630	2,177	2,332	28	40	38	1
81	Credit agencies other than banks ²	80,339	61,145	62,347	588	743	813	18
812	Savings and loan associations.....	15,055	17,766	17,963	235	322	337	6
813	Agricultural credit institutions.....	1,380	1,305	993	16	16	16	(2)
814	Personal credit institutions.....	36,133	29,923	29,779	218	217	236	4
815	Business credit institutions.....	2,416	2,933	3,033	50	73	82	2
816	Mortgage bankers and brokers.....	4,652	6,419	9,717	63	105	132	4
82	Security, commodity brokers and services ²	11,279	18,643	18,868	215	398	377	21
821	Security brokers and dealers	7,611	11,703	12,283	174	269	300	
822	Commodity contracts brokers, dealers	883	1,020	916	9	14	13	(2)
823	Security and commodity exchanges.....	110	124	113	6	7	7	(2)
828	Security and commodity services	2,493	5,148	5,730	24	45	53	
83	Insurance carriers ²	33,167	34,630	35,304	1,237	1,253	1,313	32
831	Life insurance	15,815	14,871	14,839	583	585	576	14
832	Medical service and health insurance ²	1,578	1,817	1,934	125	145	164	4
8321	Accident and health insurance.....	845	1,093	1,086	27	35	42	1
8324	Hospital and medical service plans.....	725	815	840	97	109	120	3
833	Fire, marine, and casualty insurance	9,236	10,625	10,475	449	453	475	12
835	Surety insurance	450	495	471	8	8	8	(2)
836	Title insurance	2,714	2,721	2,713	51	49	52	1
837	Pension, health, and welfare funds.....	3,157	3,160	3,914	33	22	26	(2)
84	Insurance agents, brokers and services.....	78,833	96,282	99,039	463	553	597	14
85	Real estate ²	189,952	198,480	205,597	989	1,145	1,220	22
851	Real estate operators and lessors	94,750	98,813	98,329	462	470	481	7
853	Real estate agents and managers	50,998	69,049	74,081	362	492	526	11
854	Title abstract offices.....	2,695	3,019	3,211	21	21	25	1
855	Subdividers and developers ²	13,029	17,511	18,824	111	130	146	3
8552	Subdividers and developers, n.e.c. ³	7,581	10,108	10,809	72	87	97	2
8553	Cemetery subdividers and developers	4,292	4,526	4,589	33	33	34	1
86	Combined real estate, insurance, etc.....	6,426	4,973	4,695	30	24	25	(2)
871	Holding offices.....	13,135	19,258	20,246	139	183	210	6
872	Investment offices.....	3,805	5,684	5,887	63	97	108	4
873	Trusts.....	764	803	750	7	8	9	(2)
879	Miscellaneous investing	4,240	6,280	7,107	40	46	48	1
	Administrative and auxiliary	1,661	1,944	2,097	125	167	175	4

² Less than \$500 million. ¹ Standard Industrial Classification; see text, section 13. ² Includes industries not shown separately. ³ N.e.c.=Not elsewhere classified.

Source: U.S. Bureau of the Census, *County Business Patterns*, annual.

NO. 784. FLOW OF FUNDS ACCOUNTS—FINANCIAL ASSETS AND LIABILITIES OF FINANCIAL AND NONFINANCIAL INSTITUTIONS, BY SECTOR AND TYPE OF INSTRUMENT: 1987

TYPE OF INSTRUMENT	PRIVATE DOMESTIC NONFINANCIAL INSTITUTIONS												U.S. GOVERNMENT												FINANCIAL INSTITUTIONS											
	ALL SECTORS, TOTAL ¹				Households ²				Business				State and local govts.				Monetary authority				Commercial banking				Non- bank finance				Federally sponsored credit agencies and mortgage pools							
	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L						
Total	25,350	19,987	13,834	7,249	11,512	2,904	1,791	3,765	531	580	331	2,218	10,066	9,851	286	286	2,743	2,721	5,980	5,804	1,047	1,040	-	-	-	-	-	-	-	-						
Gold stock and SDR's	11	11	-	-	-	-	-	-	-	-	-	-	-	-	11	-	(2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
IMF position	13	13	-	-	-	-	-	-	-	-	-	-	-	-	7	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Official foreign exchange	23	19	839	670	521	130	139	60	21	19	19	21	64	839	23	21	3	543	60	85	2	-	-	-	-	-	-	-	-	-						
Treasury currency, SDR certificates	2,778	2,585	2,889	2,387	2,188	139	139	71	-	-	-	-	155	2,585	137	201	-	1,373	155	1,213	-	-	-	-	-	-	-	-	-	-						
Checkable deposits, currency	2,585	2,387	301	133	-	-	-	-	-	-	-	-	-	-	-	-	-	-	217	106	85	31	-	-	-	-	-	-	-	-						
Time and savings accounts	269	316	298	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	316	-	-	-	-	-	-	-	-	-	-						
Fed. funds and security RP's	453	453	409	396	396	13	13	-	-	-	-	-	-	-	-	-	-	44	453	-	-	-	-	-	-	-	-	-	-	-						
Money market fund shares	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Mutual fund shares ³	44	44	280	280	280	22	22	-	-	-	-	-	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-					
Mutual fund shares ³	44	44	280	280	280	22	22	-	-	-	-	-	-	-	-	-	-	22	-	-	-	-	-	-	-	-	-	-	-	-	-					
Foreign deposits	290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Life insurance reserves	2,235	2,235	2,235	2,235	2,235	-	-	-	-	-	-	-	-	-	-	-	-	190	2,046	-	-	-	-	-	-	-	-	-	-	-	-	-				
Pension fund reserves	69	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71	52	5	67	67	-	-	-	-	-	-	-	-	-	-				
Inlrbank claims	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Corporate equities ⁴	2,906	1,954	1,755	1,755	1,755	-	-	-	-	-	-	-	-	-	-	-	-	974	974	974	974	974	-	-	-	-	-	-	-	-	-	-				
Credit market instruments ⁵	10,332	10,332	1,802	1,802	1,755	-	-	-	-	-	-	-	-	-	-	-	-	236	1,959	7,752	1,807	2,310	-	-	-	-	-	-	-	-	-	-				
U.S. Treasury securities ⁶	1,954	1,954	6,322	6,322	2,810	2,810	2,810	2,810	2,958	2,958	358	554	358	162	1,954	1,954	1,954	892	892	223	223	231	-	-	-	-	-	-	-	-	-	-				
Federal agency securities ⁷	979	979	519	519	519	519	519	519	81	81	86	86	86	86	86	86	86	974	974	974	974	974	-	-	-	-	-	-	-	-	-	-				
Tax-exempt securities	724	724	304	304	724	724	724	724	79	79	11	11	11	11	11	11	11	529	529	529	529	529	-	-	-	-	-	-	-	-	-	-				
Corporate and foreign bonds	1,180	1,180	119	119	764	764	764	764	119	119	764	764	764	764	764	764	764	904	904	904	904	904	-	-	-	-	-	-	-	-	-	-				
Mortgages	2,885	2,885	241	241	2,882	146	1,886	1,886	986	986	42	42	42	42	42	42	42	49	49	49	49	49	-	-	-	-	-	-	-	-	-	-				
Consumer credit	701	701	42	42	701	701	701	701	721	721	48	48	48	48	48	48	48	617	617	617	617	617	-	-	-	-	-	-	-	-	-	-				
Bank loans, n.e.c.	721	721	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Open-market paper	439	439	157	157	74	74	74	74	83	83	74	74	74	74	74	74	74	271	271	271	271	271	-	-	-	-	-	-	-	-	-	-				
Security credit	105	105	33	33	46	46	46	46	33	33	46	46	46	46	46	46	46	72	72	72	72	72	-	-	-	-	-	-	-	-	-	-	-			
Proprietors' equity	2,393	2,393	2,383	2,383	2,383	2,383	2,383	2,383	33	33	703	703	703	703	703	703	703	34	34	34	34	34	-	-	-	-	-	-	-	-	-	-	-			
Trade credit	798	666	703	605	605	605	605	605	11	11	23	23	23	23	23	23	23	7	7	7	7	7	-	-	-	-	-	-	-	-	-	-	-			
Taxes payable	16	16	14	14	23	23	23	23	184	184	15	15	15	15	15	15	15	486	486	486	486	486	-	-	-	-	-	-	-	-	-	-	-			
Miscellaneous claims	1,694	1,722	681	681	-	-	-	-	-	-	-	-	-	-	-	-	-	1,112	1,112	1,112	1,112	1,112	-	-	-	-	-	-	-	-	-	-	-	-		

¹ Includes "rest of world," not shown separately. ² Includes personal trusts and nonprofit organizations. ³ Nonbank finance liability is redemptions value of shares of open-end investment companies. ⁴ Assets shown at market value. ⁵ Includes "Other loans," not shown separately. ⁶ Issues by agencies in the budget and by sponsored credit agencies in financial sectors; issues backed by mortgage pools, and loan participation certificates. ⁷ Issues by agencies in the budget and by sponsored credit agencies in the budget and by nonmarketable debt held by public. ⁸ Asset is corporate only, noncorporate credit deducted in liability total to conform to quarterly flow tables.

Source: Board of Governors of the Federal Reserve System, *Annual Statistical Digest*.

Flow of Funds Accounts

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No. 785. FLOW OF FUNDS ACCOUNTS—FINANCIAL ASSETS OF FINANCIAL AND NONFINANCIAL INSTITUTIONS, BY HOLDER SECTOR: 1970 TO 1987

[In billions of dollars. As of Dec. 31. See also *Historical Statistics, Colonial Times to 1970*, series X 192, X 229, X 821, and X 835]

SECTOR	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
All sectors	4,650	7,058	13,026	14,167	15,358	17,020	18,745	21,265	23,801	26,350
Households	2,494	3,518	6,567	7,122	7,719	8,473	9,118	10,188	11,063	11,512
Nonfinancial business	417	618	1,101	1,195	1,226	1,345	1,470	1,594	1,718	1,791
Farm	11	15	24	28	29	31	34	36	39	39
Nonfarm noncorporate	35	44	64	70	74	74	86	102	110	76
Nonfinancial corporations	370	559	1,013	1,099	1,124	1,242	1,352	1,459	1,571	1,676
U.S. Government	90	122	224	246	268	281	313	348	357	331
U.S. Government-sponsored credit agencies and mortgage pools	52	122	309	362	434	502	588	695	880	1,047
State and local government	72	129	218	224	244	282	328	440	498	531
Monetary authorities	86	125	174	182	194	204	213	243	276	288
Commercial banking ²	517	886	1,482	1,613	1,724	1,874	2,106	2,345	2,598	2,743
Domestic commercial banks	489	792	1,266	1,365	1,472	1,603	1,801	1,994	2,172	2,262
Foreign banking offices in U.S.	9	29	101	125	111	113	126	147	187	231
Nonbank finance	825	1,356	2,549	2,825	3,145	3,572	4,038	4,708	5,491	5,990
Savings and loan associations ³	173	333	622	658	708	830	990	1,072	1,156	1,263
Life insurance	201	280	464	508	568	633	693	796	906	1,000
Other insurance	50	77	174	186	203	225	241	291	346	387
Private pension funds	112	225	470	487	557	669	695	838	939	986
Govt. retirement funds ⁴	60	105	198	224	263	311	357	405	469	509
Finance companies	64	98	202	227	237	264	302	354	412	449
Money market funds	-	4	76	186	220	179	234	244	292	316
Mutual savings banks ⁵	79	121	172	175	174	194	205	218	239	283
Investment companies	47	43	62	60	77	112	137	240	414	453
Credit unions	18	37	69	72	83	98	113	137	166	184
Security brokers, dealers	16	19	36	39	43	48	52	76	78	66
CMO ⁶ issuers	-	-	-	-	(2)	4	16	29	66	104
Real estate investment trusts	4	14	3	3	4	4	6	8	9	12
Rest of the world	99	184	405	399	403	487	566	704	822	1,119

- Represents zero. ² Less than \$500 million. ¹ Includes personal trusts and nonprofit organizations. ² Includes other sectors not shown separately. ³ See footnote 2, table 787. ⁴ State and local. ⁵ Includes Federal savings banks insured by Federal Deposit Insurance Corporation and a few insured by Federal Savings and Loan Insurance Corporation.

⁶ Collateralized mortgage obligations.

Source: Board of Governors of the Federal Reserve System, *Annual Statistical Digest*.

No. 786. FLOW OF FUNDS ACCOUNTS—ASSETS AND LIABILITIES OF HOUSEHOLDS: 1970 TO 1987

[As of December 31. Includes personal trusts and nonprofit organizations. See also *Historical Statistics, Colonial Times to 1970*, series X 114-147]

TYPE OF INSTRUMENT	TOTAL (bil. dol.)							PERCENT DISTRIBUTION		
	1970	1975	1980	1984	1985	1986	1987	1970	1980	1987
Total financial assets	2,494	3,518	6,567	9,118	10,188	11,083	11,512	100.0	100.0	100.0
Deposit and market instruments ¹	793	1,270	2,180	3,353	3,890	3,945	4,226	31.8	32.9	38.7
Checkable deposits and currency	118	168	272	368	407	507	521	4.7	4.1	4.5
Small time and savings deposits	410	721	1,141	1,686	1,830	1,946	2,021	16.4	17.4	17.6
Money market fund shares	-	4	65	202	215	257	284	-	1.0	2.5
Large time deposits	16	44	131	180	185	149	167	.7	2.0	1.5
Credit market instruments	248	334	551	917	1,074	1,086	1,233	10.1	8.4	10.7
U.S. Government securities	103	131	247	495	552	552	600	4.1	3.8	5.2
Treasury issues	63	119	206	443	474	485	519	3.3	3.1	4.5
Savings bonds	52	67	73	75	80	93	101	2.1	1.1	.9
Other Treasury	31	52	133	368	394	392	418	1.2	2.0	3.6
Agency issues	20	12	41	52	78	66	81	.8	.6	.7
Tax-exempt obligations	46	68	88	192	240	232	286	1.8	1.3	2.5
Corporate and foreign bonds	38	67	59	48	61	96	119	1.4	.8	1.0
Mortgages	52	58	117	151	151	147	146	2.1	1.8	1.3
Open-market paper	12	9	41	30	70	60	83	.5	.6	.7
Mutual fund shares	46	39	52	118	203	366	396	1.9	.8	3.4
Corporate equities	683	509	1,112	1,321	1,687	1,845	1,755	27.4	16.9	15.2
Life insurance reserves	131	167	216	246	257	274	290	5.2	3.3	2.5
Pension fund reserves ²	241	444	916	1,513	1,791	2,054	2,235	9.7	14.0	19.4
Equity in noncorporate business	572	955	2,023	2,433	2,398	2,380	2,393	22.9	30.8	20.8
Security credit	4	5	15	18	31	39	33	.2	.2	.3
Miscellaneous assets	26	41	72	117	131	160	184	1.1	1.1	1.6
Total liabilities	501	791	1,507	2,150	2,455	2,739	2,904	100.0	100.0	100.0
Credit market instruments	480	762	1,450	2,074	2,380	2,635	2,810	95.8	96.2	96.8
Mortgages	309	495	975	1,344	1,495	1,883	1,886	81.7	84.7	85.3
Installment consumer credit	106	189	300	453	531	586	624	21.1	19.9	21.5
Other consumer credit	38	51	74	108	126	137	77	7.5	4.9	2.7
Tax-exempt debt	-	3	17	51	81	79	79	-	1.1	2.7
Bank loans, not elsewhere classified	7	14	30	37	44	52	48	1.4	2.0	1.6
Other loans	21	32	65	79	83	88	87	4.2	3.6	3.0
Security credit	-	10	12	27	35	51	60	4.6	2.1	1.8
Trade credit	5	9	17	26	28	31	33	1.1	1.1	1.2
Unpaid life insurance premiums ³	5	8	13	15	15	14	15	1.0	.9	.5

- Represents zero. ¹ Excludes corporate equities. ² See also table 581. ³ Includes deferred premiums.

Source: Board of Governors of the Federal Reserve System, *Annual Statistical Digest*.

Banking, Finance, and Insurance

No. 787. FLOW OF FUNDS ACCOUNTS—ASSETS AND LIABILITIES OF PRIVATE NONBANK FINANCIAL INSTITUTIONS, BY TYPE OF INSTRUMENT: 1987

[In billions of dollars. As of Dec. 31. Preliminary. A=Assets; L=Liabilities; "N.e.c."=Not elsewhere classified; RP's=Repurchase agreements]

TYPE OF INSTRUMENT	TOTAL ¹		SAVINGS AND LOAN ASSOCIATIONS ⁴		LIFE INSURANCE COMPANIES		PRIVATE PENSION FUNDS		STATE AND LOCAL GOVERNMENT RETIREMENT FUNDS		INVESTMENT COMPANIES	
	A	L	A	L	A	L	A	L	A	L	A	L
Total.....	5,990	5,804	1,283	1,218	1,000	951	986	986	509	509	453	453
Checkable deposits.....	60	85	15	41	5	-	9	-	2	-	7	-
Time and savings accounts.....	155	1,213	7	887	-	-	70	-	19	-	-	-
Federal funds, security RP's.....	108	85	27	85	-	-	-	-	-	-	-	-
Money market fund shares.....	19	316	-	-	7	-	12	-	-	-	-	-
Foreign deposits.....	22	-	-	-	-	-	-	-	-	-	-	-
Reserves:												
Life insurance.....	-	279	-	-	-	279	-	-	-	-	-	-
Pension fund.....	-	2,046	-	-	562	-	986	-	509	-	-	-
Mutual fund shares.....	44	453	-	-	15	-	29	-	-	-	-	453
Corporate equities.....	974	-	-	78	-	461	-	173	-	-	174	-
Credit market instruments.....	4,212	642	1,069	181	812	-	346	-	315	-	272	-
Securities:												
U.S. Treasury.....	452	-	21	-	65	-	67	-	107	-	99	-
Federal agency.....	624	-	198	-	65	-	56	-	56	-	35	-
Tax-exempt.....	246	-	1	-	12	-	-	-	1	-	71	-
Corporate and foreign bonds.....	892	259	38	16	376	-	147	-	136	-	54	-
Mortgages.....	1,190	3	708	-	212	-	8	-	15	-	-	-
Consumer credit.....	324	-	56	-	-	-	-	-	-	-	-	-
Bank loans, n.e.c.....	-	33	-	32	-	-	-	-	-	-	-	-
Open market paper.....	258	214	23	-	30	-	69	-	-	-	-	-
Other loans.....	285	133	24	133	53	-	-	-	-	-	-	-
Security credit.....	37	59	-	-	-	-	-	-	-	-	-	-
Trade credit.....	34	-	-	-	-	-	-	-	-	-	-	-
Taxes payable.....	-	2	-	-	-	1	-	-	-	-	-	-
Miscellaneous.....	329	626	144	25	84	120	60	-	-	-	-	-

¹ Represents or rounds to zero. ² Includes other institutions, not shown separately. ³ Includes most Federal savings banks insured by FSLIC. A few of them are included with mutual savings banks, not shown separately.

No. 788. FLOW OF FUNDS ACCOUNTS—CREDIT MARKET DEBT OUTSTANDING: 1970 TO 1987

[In billions of dollars; except percent. As of Dec. 31. "N.e.c."=Not elsewhere classified]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Credit market debt.....	1,604	2,624	4,682	5,183	5,644	6,314	7,225	8,279	9,405	10,332
Government.....	450	667	1,036	1,132	1,315	1,536	1,762	2,077	2,336	2,513
Federal.....	301	446	743	830	991	1,178	1,377	1,600	1,815	1,959
State and local.....	149	220	295	302	324	358	385	477	520	554
Non-government.....	1,154	1,958	3,644	4,051	4,328	4,778	5,463	6,202	7,069	7,818
Financial ¹	310	261	563	665	758	858	1,009	1,210	1,512	1,807
Sponsored credit agencies ²	39	80	163	195	210	212	242	264	279	308
Mortgage pools.....	5	28	114	129	179	245	289	369	532	670
Commercial banks ³	13	42	91	112	131	148	171	180	177	187
Savings and loan associations.....	11	18	58	73	76	74	93	116	145	181
Finance companies.....	52	82	137	156	163	178	198	253	316	357
Foreign.....	52	95	197	221	210	228	238	237	238	243
Private domestic nonfinancial.....	981	1,802	2,884	3,165	3,360	3,693	4,219	4,755	5,319	5,768
Corporations ¹	354	545	912	1,018	1,086	1,151	1,347	1,519	1,709	1,867
Bonds.....	167	261	412	448	482	507	574	670	781	880
Mortgages.....	59	66	81	79	77	81	81	82	84	87
Bank loans, n.e.c.....	104	169	292	326	363	381	445	482	538	551
Nonbank finance loans.....	14	32	79	89	91	102	130	152	169	199
Individuals.....	628	1,057	1,972	2,147	2,272	2,542	2,872	3,236	3,610	3,902
By sector:										
Households ⁴	480	762	1,450	1,575	1,657	1,845	2,074	2,360	2,635	2,810
Farm.....	47	82	160	176	183	187	187	173	158	145
Nonfarm noncorporate.....	100	213	362	396	432	510	611	703	818	946
By type of instrument:										
Mortgages.....	410	717	1,368	1,477	1,552	1,732	1,951	2,185	2,480	2,795
Consumer credit.....	143	220	374	398	416	472	563	657	723	701
Policy loans.....	17	26	43	50	54	55	56	56	55	55
Bank loans, n.e.c.....	30	47	75	88	101	108	108	110	117	114
Other loans.....	28	45	98	115	121	133	144	147	155	158
Tax-exempt debt.....	-	3	17	21	30	41	51	81	79	79
ANNUAL PERCENT CHANGE ⁵	7.5	8.8	10.1	10.7	9.6	11.8	14.5	14.6	13.7	10.2
Credit market debt.....	4.1	23.7	11.9	11.8	19.4	18.8	16.9	16.2	13.4	7.9
Federal government.....	8.2	5.9	6.2	2.3	7.1	10.5	7.7	23.8	9.3	6.5
State and local government.....										
Financial.....	15.0	4.5	19.1	18.1	13.8	13.1	17.7	19.7	24.4	18.8
Foreign.....	5.7	17.4	14.0	11.9	7.2	8.2	3.7	.5	3.8	1.6
Households.....	5.2	7.1	6.9	8.3	5.7	11.4	12.7	14.1	11.9	9.4
Nonfinancial business.....	10.1	4.9	9.7	11.2	7.3	8.3	15.9	11.5	12.2	9.1

¹ Represents zero. ² Includes other types, not shown separately. ³ U.S. Government. ⁴ Includes bank affiliates.

⁵ See footnote 2, table 784. ⁶ Percent change from immediate preceding year.

Source of tables 787 and 788: Board of Governors of the Federal Reserve System, *Annual Statistical Digest*.

NO. 789. OWNERSHIP OF PUBLIC DEBT SECURITIES BY PRIVATE INVESTORS: 1970 TO 1987

[As of December. Par values. Estimated]

INVESTOR	AMOUNT (bill. dol.)							PERCENT DISTRIBUTION				
	1970	1975	1980	1984	1985	1986	1987	1970	1975	1980	1985	1987
Total privately held.....	229.1	349.4	616.4	1,212.5	1,417.2	1,612.0	1,745.2	100.0	100.0	100.0	100.0	100.0
Commercial banks ¹	62.7	85.1	112.1	183.4	192.2	238.3	253.3	27.4	24.4	18.2	13.6	14.5
Nonbank investors.....	168.4	264.2	504.3	1,029.1	1,225.0	1,373.7	1,492.1	72.6	75.6	81.8	86.4	85.5
Individuals ²	61.2	90.8	117.1	143.8	154.8	162.8	(NA)	35.4	26.0	19.0	10.9	(NA)
Insurance companies.....	7.4	9.5	24.0	88.7	115.4	135.4	(NA)	3.2	2.7	3.9	8.1	(NA)
Money market funds.....	(NA)	(NA)	3.5	25.9	25.1	28.0	14.3	(NA)	.6	1.8	.8	
Corporations ³	7.3	21.3	19.3	50.1	59.0	68.8	84.6	3.2	6.1	3.1	4.2	4.8
State and local governments ⁴	27.8	34.2	87.9	173.0	224.0	260.0	(NA)	12.1	9.8	14.3	15.8	(NA)
Foreign and international ⁵	19.8	66.5	129.7	192.9	212.5	251.6	287.3	8.6	19.0	21.0	15.0	16.5
Other investors ⁶	23.0	41.8	122.8	354.7	434.2	467.1	(NA)	10.0	12.0	18.9	30.6	

NA. Not available. ¹ Consists of domestically chartered banks, U.S. branches and agencies of foreign banks, NY investment companies majority owned by foreign banks, and Edge Act corporations owned by domestically chartered and foreign banks.

² Includes partnerships and personal trust accounts. ³ Exclusive of banks and insurance companies. ⁴ Includes State and local pension funds.

⁵ Consists of the investment of foreign balances and international accounts in the United States.

⁶ Consists of savings and loan associations, credit unions, mutual savings banks, nonprofit institutions, money market funds (for 1970 and 1975), corporate pension trust funds, and dealers and brokers. Also included are certain government deposit accounts and government-sponsored agencies.

Source: U.S. Dept. of the Treasury, *Treasury Bulletin*, quarterly.

NO. 790. SELECTED FINANCIAL INSTITUTIONS—NUMBER AND ASSETS, BY ASSET SIZE: 1987

[As of December]

ASSET SIZE	NUMBER OF INSTITUTIONS				ASSETS (bill. dol.)			
	F.D.I.C.-insured commercial banks ¹	F.S.L.I.C.-insured savings institutions ²	F.D.I.C.-insured savings banks ¹	Credit unions ³	F.D.I.C.-insured commercial banks ^{1,4}	F.S.L.I.C.-insured savings institutions ²	F.D.I.C.-insured savings banks ¹	Credit unions ³
Total	13,699	3,147	484	14,335	3,000.9	1,251.8	261.9	182.2
Less than \$5.0 million.....	207	1	9,844	.7	(2)	(2)	13.9	
\$5.0 million-\$9.9 million.....	826	341	1,614	6.4	(2)	(2)	11.4	
\$10.0 million-\$24.9 million.....	3,474	20	1,551	59.8	(2)	(2)	24.8	
\$25.0 million-\$49.9 million.....	3,558	43	671	128.0	20.0	1.5	23.4	
\$50.0 million-\$99.9 million.....	2,862	702	87	371	50.0	6.5	25.8	
\$100.0 million-\$499.9 million.....	2,201	1,146	225	280	424.4	243.2	53.0	49.0
\$500.0 million or more.....	571	418	102	15	2,182.7	933.0	200.4	13.9
PERCENT DISTRIBUTION								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5.0 million.....	1.5	2	68.7	(2)	(2)	(2)	8.8	
\$5.0 million-\$9.9 million.....	6.0	10.8	11.2	2	4	(2)	7.0	
\$10.0 million-\$24.9 million.....	25.4	4.1	10.8	2.0	1	(1)	15.3	
\$25.0 million-\$49.9 million.....	28.0	17.2	8.9	4.7	1.6	.6	14.4	
\$50.0 million-\$99.9 million.....	20.9	22.3	18.0	2.6	4.0	2.5	15.8	
\$100.0 million-\$499.9 million.....	16.1	36.4	46.5	1.9	14.1	19.4	20.2	30.2
\$500.0 million or more.....	4.2	13.3	21.1	.1	72.7	74.6	76.5	8.6

² Less than \$50 million or .05 percent.

¹ Source: U.S. Federal Deposit Insurance Corporation (F.D.I.C.), unpublished data.

² Source: U.S. League of Savings Institutions, Washington, DC, *Savings Institutions Sourcebook*, annual. F.S.L.I.C.=Federal Savings and Loan Insurance Corporation. ³ Source: National Credit Union Administration, *National Credit Union Administration Year-end Statistics 1987*. Excludes nonfederally insured State chartered credit unions and federally insured corporate credit unions.

⁴ Includes foreign branches of U.S. banks.

Source: Compiled from sources listed in footnotes.

NO. 791. FEDERAL RESERVE MEMBER BANKS—REVENUE AND EXPENSES: 1970 TO 1987

[Includes one member bank in the Virgin Islands. Minus sign (-) indicates loss]

ITEM	Unit	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
Member banks.....	Number.....	5,769	5,790	5,425	5,422	5,474	5,619	5,807	5,961	6,034	5,968	5,717
Current revenue.....	Bil. dol.....	27.0	51.4	118.9	150.6	196.6	202.3	185.8	215.6	211.8	222.5	
Expenses.....	Bil. dol.....	22.2	44.4	105.8	138.5	181.9	188.4	171.8	200.9	200.2	197.4	220.9
Net current earnings.....	Bil. dol.....	5.7	7.0	13.1	14.2	14.7	12.9	14.0	14.7	17.8	17.2	2.7
Net income.....	Bil. dol.....	3.8	5.5	9.2	9.9	10.6	10.7	10.8	11.2	13.5	13.3	-6.7
Cash dividends declared.....	Bil. dol.....	1.8	2.5	3.5	3.9	4.4	4.9	5.5	5.7	6.3	6.9	8.2
Capital account ¹	Bil. dol.....	33.0	50.0	67.1	73.7	80.9	88.7	96.7	108.6	117.6	126.2	128.5
Ratios to avg. capital accounts:												
Net current earnings.....	Percent.....	17.4	13.9	19.5	19.2	18.2	15.7	14.5	13.8	15.1	13.6	2.1
Net income.....	Percent.....	11.6	11.1	13.7	13.4	13.1	12.1	11.2	10.5	11.5	10.6	-.5
Cash dividends declared.....	Percent.....	5.3	5.0	5.2	5.3	5.5	5.5	5.7	5.3	5.4	5.5	6.3

¹ Averages of amounts reported for varying call dates; for details, see source.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly.

Banking, Finance, and Insurance

No. 792. FDIC-INSURED BANKS—NUMBER, BANKING OFFICES, AND DEPOSITS, BY CLASS OF BANK: 1987

[As of June 30. Includes Puerto Rico and outlying areas. FDIC = Federal Deposit Insurance Corporation]

CLASS OF BANK	Banks (num- ber)	Bank- ing offices (num- ber)	DEPOSITS (mil. dol.)				
			Total ¹	Individuals, partnerships and corporations			Government
				Total	Trans- action ac- counts ²	Non- transac- tion accounts	
Total	14,435	62,344	2,137,284	1,935,170	544,879	1,390,291	112,083
Commercial banks	13,955	58,806	1,935,940	1,734,036	527,073	1,206,983	112,073
National banks	4,747	28,339	1,110,273	992,380	307,365	685,015	62,752
State (Federal Reserve, member bank)	1,096	6,358	270,613	237,190	80,391	156,799	12,053
State (non-Federal Reserve member)	8,112	24,109	655,054	504,466	138,317	365,149	37,268
Savings banks	480	3,488	198,215	188,214	17,353	180,861	-
U.S. branches of foreign banks	-	50	3,129	2,920	453	2,467	10

¹ Represents zero. ² Includes other types of deposits, not shown separately. ² A transaction account is a deposit or account on which the depositor or account holder is permitted to make withdrawals by negotiable or transferable instrument, payment orders or withdrawal, telephone transfers, or other similar devices for the purpose of making payments or transfers to others.

Source: U.S. Federal Deposit Insurance Corporation, *Data Book, Operating Banks and Branches, June 30, 1987*, vol. 1.

No. 793. BANKING OFFICES, BY DEPOSIT INSURANCE STATUS: 1970 TO 1987

[As of December 31. Includes Puerto Rico and outlying areas. Beginning 1982 excludes automatic teller machines that were previously being reported by many banks as branches. See also *Historical Statistics, Colonial Times to 1970*, series X 716-724]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
All banking offices.....	37,166	47,239	57,232	59,348	57,913	59,050	60,087	60,890	61,897	62,914
Commercial banks, total.....	35,585	44,917	53,649	55,749	54,829	55,960	57,010	57,784	58,585	59,423
Member, Federal Reserve System.....	21,989	26,526	29,885	31,414	30,921	31,946	32,809	33,854	34,542	35,196
National banks.....	17,191	21,073	24,217	25,221	24,867	26,080	27,037	27,844	28,218	28,744
State banks.....	4,798	5,453	5,768	6,193	6,054	5,866	5,772	6,010	6,324	6,452
Nonmember banks.....	13,596	18,391	23,664	24,335	23,908	24,014	24,201	23,910	24,023	24,227
Insured.....	13,332	18,043	23,186	23,788	23,314	23,380	23,535	23,910	24,023	24,227
Noninsured.....	264	348	478	547	594	634	666	(NA)	(NA)	(NA)
Savings banks, total.....	1,581	2,322	3,583	3,599	3,084	3,090	3,057	3,126	3,332	3,491
Insured.....	1,223	1,897	3,086	3,217	2,733	2,760	2,728	3,126	3,332	3,491
Noninsured.....	358	425	517	382	351	330	329	(NA)	(NA)	(NA)

NA Not available.

Source: U.S. Federal Deposit Insurance Corporation, *Annual Report*, and unpublished data.

No. 794. CHANGES IN NUMBER OF OPERATING BANKING OFFICES: 1970 TO 1987

[As of December 31. Includes Puerto Rico and outlying areas. Beginning 1985, excludes noninsured institutions. Minus sign (−) indicates decrease]

TYPE OF CHANGE	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Banking offices ¹.....	37,166	47,239	57,232	59,348	57,913	59,050	60,087	60,890	61,897	62,914
Number of banks.....	14,199	15,130	15,330	15,355	15,412	15,440	15,489	14,809	14,681	14,207
Number of branches ¹	22,967	32,109	41,902	43,993	42,501	43,610	44,578	46,081	47,216	48,707
Net change during year.....	1,584	1,931	2,306	2,118	−1,435	1,137	1,017	1,759	1,007	1,017
Offices opened.....	1,884	2,224	2,800	2,901	2,387	2,119	2,398	2,874	2,756	3,144
Banks.....	186	277	271	265	379	432	486	482	396	271
Branches.....	1,678	1,947	2,529	2,636	2,008	1,887	1,852	2,392	2,360	2,873
Offices closed.....	280	293	494	785	3,822	982	1,321	1,115	1,749	2,127
Banks.....	165	108	142	240	322	404	427	460	524	745
Branches.....	115	185	352	545	2,3,500	578	894	655	1,225	1,382

¹ See headnote, table 793. ² Includes 3,000 automatic teller machines that were previously reported as branches.

Source: U.S. Federal Deposit Insurance Corporation, *Annual Report*, and unpublished data.

Bank Holding Companies—Commercial Banks

491

NO. 795. BANK HOLDING COMPANIES—OFFICES, ASSETS, AND DEPOSITS: 1970 TO 1987

[As of Dec. 31. A "bank holding company" means any company which has control over any bank or over any company that is, or becomes, a bank holding company by virtue of the Bank Holding Company Act and its amendments. Represents domestic data only]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Number of companies.....	121	1,821	2,905	3,500	4,285	5,399	5,702	5,946	6,467	6,503
Banking offices.....	4,155	22,056	29,924	33,733	37,068	41,349	44,670	47,106	48,935	50,678
Banks.....	895	3,674	4,954	5,689	6,731	7,835	8,840	9,156	9,404	9,316
Branches.....	3,260	18,362	24,970	28,044	30,337	33,514	35,830	37,950	39,531	41,362
Assets (bil. dol.)	82.9	661.3	1,134.4	1,296.7	1,531.0	1,734.9	1,891.5	2,151.5	2,344.0	2,371.5
Percent of all commercial banks.....	16.1	68.5	74.1	77.3	82.6	86.0	89.4	90.2	90.9	91.1
Deposits (bil. dol.).....	78.1	527.5	840.6	938.7	1,108.5	1,279.4	1,411.8	1,595.2	1,757.5	1,785.4

Source: Board of Governors of the Federal Reserve System, *Banking and Monetary Statistics, 1941-1970; Annual Statistical Digest*; and unpublished data.

NO. 796. COMMERCIAL BANKS—DOMESTIC ASSETS AND DEPOSITS, STATES AND OTHER AREAS: 1987

[As of December 31. Excludes foreign branches of U.S. banks]

STATE	ALL COMMERCIAL BANKS ¹				INSURED COMMERCIAL BANKS ³		STATE OR OTHER AREA	ALL COMMERCIAL BANKS ¹				INSURED COMMERCIAL BANKS ³		
	Assets		Deposits					Assets		Deposits				
	Total (bil. dol.)	Per- cent held by multi- bank hold- ing com- panies	Total (bil. dol.)	Per cap- ita ² (dol.)	Assets (bil. dol.)	Depos- its (bil. dol.)		Total (bil. dol.)	Per- cent held by multi- bank hold- ing com- panies	Total (bil. dol.)	Per cap- ita ² (dol.)	Assets (bil. dol.)	Depos- its (bil. dol.)	
Total.....	(NA)	(NA)	(NA)	(NA)	2,575.4	1,993.1	NE.....	16.8	41.3	14.5	9,113	16.8	14.5	
U.S.....	2,802.0	72.9	1,979.9	8,134	2,562.0	1,981.8	NV.....	10.1	65.6	6.1	6,091	10.1	6.1	
AL.....	30.5	74.8	24.3	5,944	30.5	24.3	NH.....	9.1	89.2	7.6	7,168	9.1	7.6	
AK.....	5.0	39.3	4.0	7,546	5.0	4.0	NJ.....	75.2	70.3	61.6	8,090	75.3	61.7	
AZ.....	27.7	94.4	23.4	6,921	27.7	23.4	NM.....	9.8	55.7	8.4	5,583	9.8	8.4	
AR.....	17.8	42.8	15.7	6,589	17.8	15.7	NY.....	401.1	85.8	248.2	13,925	381.0	247.9	
CA.....	240.5	57.6	197.4	7,138	233.1	199.3	NC.....	59.4	86.3	41.1	6,402	59.2	41.1	
CO.....	24.5	75.8	20.2	6,137	24.6	20.3	ND.....	7.0	47.0	6.1	9,093	7.0	6.1	
CT.....	35.1	79.1	27.4	8,523	36.1	27.4	OH.....	92.5	82.0	72.7	6,745	91.9	72.7	
DE.....	43.0	62.4	19.8	30,866	43.0	19.8	OK.....	27.0	87.4	23.7	7,228	27.0	23.7	
DC.....	15.4	95.4	11.8	19,052	15.2	11.8	OR.....	185.5	89.0	14.6	5,269	183.3	14.7	
FL.....	110.2	78.2	90.8	7,555	109.8	90.8	PA.....	199.9	84.2	105.3	8,824	137.0	105.3	
GA.....	52.4	83.2	40.4	6,498	52.0	40.4	RI.....	12.8	89.5	8.8	8,915	12.8	8.8	
HI.....	11.6	47.9	10.2	9,376	10.1	10.2	SC.....	17.9	52.4	13.7	3,989	17.9	13.7	
ID.....	7.2	84.9	5.9	5,878	7.2	5.9	SD.....	20.3	83.7	8.3	11,770	20.5	8.3	
IL.....	152.0	73.6	113.2	9,773	151.3	113.2	TN.....	40.6	74.0	33.7	6,941	40.5	33.7	
IN.....	49.6	64.0	41.3	7,458	49.3	41.3	TX.....	186.6	74.3	146.9	8,753	185.8	146.7	
IA.....	30.2	38.8	26.0	9,158	30.2	26.0	UT.....	10.9	80.2	8.7	5,150	10.8	8.7	
KS.....	24.7	30.0	21.6	8,732	24.7	21.6	VT.....	4.9	40.6	4.4	8,061	4.9	4.4	
KY.....	34.7	60.9	27.5	7,389	34.6	27.5	VA.....	55.9	85.2	44.8	7,591	55.2	44.8	
LA.....	35.3	28.4	30.5	6,832	35.1	30.5	WA.....	31.2	88.9	25.6	5,642	30.9	25.6	
ME.....	6.8	86.3	5.8	4,855	6.8	5.8	WV.....	15.2	60.8	13.2	6,932	15.2	13.2	
MD.....	43.6	65.2	32.7	7,201	43.5	32.7	WI.....	40.4	69.4	34.4	7,146	40.2	34.2	
MA.....	87.1	71.0	63.8	10,902	86.6	63.8	WY.....	4.2	65.9	3.8	7,734	4.2	3.8	
MI.....	78.2	88.5	63.8	6,832	76.5	64.1	AM ⁴	(NA)	(NA)	(NA)	(NA)	(2)	(2)	
MN.....	53.1	70.4	38.7	9,351	52.5	39.7	PR ⁴	(NA)	(NA)	(NA)	(NA)	13.0	10.8	
MS.....	18.3	18.6	15.8	6,032	18.3	15.8	GU ⁴	(NA)	(NA)	(NA)	(NA)	.3	.3	
MO.....	52.9	72.2	44.6	8,731	52.7	44.6	Pacific Islands ⁴	(NA)	(NA)	(NA)	(NA)	(2)	(2)	
MT.....	7.3	66.2	6.2	7,671	7.3	6.2								

NA . Not available. Z Less than \$60 million. ¹Data reflect revisions submitted by banks after original filing date.

²Based on U.S. Bureau of the Census estimated resident population as of July 1. ³Source: U.S. Federal Deposit Insurance Corporation, unpublished data. ⁴Consists of data for one insured commercial bank chartered in the outlying areas.

Source: Except as noted, Board of Governors of the Federal Reserve System, *Annual Statistical Digest*.

Banking, Finance, and Insurance

NO. 797. INSURED COMMERCIAL BANKS—ASSETS AND LIABILITIES: 1975 TO 1987

[In billions of dollars, except number of banks. As of Dec. 31. Includes outlying areas. Excludes noninsured banks and nondeposit trust companies. 1975 includes American branches of foreign banks. Except as noted, includes foreign branches of U.S. banks. See *Historical Statistics, Colonial Times to 1970*, series X 588-609, for related data]

ITEM	1975	1980	1981	1982	1983	1984	1985	1986	1987
Number of banks.....	14,384	14,434	14,414	14,452	14,465	14,481	14,404	14,200	13,699
Assets.....	1,095.4	1,855.7	2,029.1	2,194.3	2,342.1	2,508.6	2,731.0	2,941.1	3,000.9
Securities, total ¹	291.5	334.4	352.1	386.0	441.3	385.6	439.6	485.0	520.7
U.S. Treasury, direct obligations.....	81.0	104.5	103.7	118.7	168.1	108.2	118.3	127.2	178.2
Obligations of States and subdivisions ²	100.9	146.3	151.5	155.2	158.4	120.9	160.8	140.4	120.8
Federal funds sold and securities purchased ³	37.0	70.3	91.2	103.9	93.5	110.8	133.2	139.3	130.6
Net loans and leases ⁴	590.1	1,006.4	1,120.2	1,211.8	1,301.3	1,489.7	1,807.8	1,727.8	1,779.8
Commercial and industrial loans.....	(NA)	391.0	454.8	504.4	524.8	555.0	577.7	600.9	589.7
Real estate loans.....	269.1	281.4	308.0	336.8	386.6	438.5	515.3	599.9	
Loans to depository institutions ⁵	(NA)	81.2	94.7	106.8	109.2	72.3	88.0	70.3	64.3
Loans to farmers (excl. real estate).....	(NA)	32.3	33.7	37.0	39.9	40.7	36.1	31.7	29.4
Other loans to individuals.....	(NA)	187.4	193.0	199.2	224.6	268.8	309.0	335.7	351.2
All other loans ⁶	(NA)	62.6	69.4	73.1	83.6	176.6	195.1	191.9	210.0
Lease financing receivables.....	(NA)	14.0	15.9	18.7	17.1	20.2	24.3	27.5	31.0
Cash, balances with banks, etc.....	189.4	331.8	327.4	334.3	341.9	323.5	340.6	379.2	356.2
Other.....	47.4	112.6	138.2	158.5	164.2	198.9	209.8	209.8	211.6
Liabilities and equity capital.....	^a 1,095.4	1,855.7	2,029.1	2,194.3	2,342.1	2,508.6	2,731.0	2,941.1	3,000.9
Deposits.....	915.9	1,481.2	1,588.8	1,706.5	1,842.5	1,982.6	2,117.8	2,283.5	2,334.9
Demand ⁷	(NA)	415.1	369.2	354.2	370.6	421.6	460.9	510.8	455.6
Time and savings ⁷	(NA)	755.6	885.1	1,028.1	1,140.9	1,223.4	1,345.2	1,458.9	1,537.7
Deposits in foreign offices.....	(NA)	(NA)	(NA)	(NA)	317.8	321.8	313.8	341.6	
Individuals, partnerships and corporations ⁷	(NA)	1,007.8	1,103.9	1,214.9	1,353.6	1,486.8	1,617.1	1,751.9	1,797.2
Government ⁷	(NA)	84.2	85.3	90.0	86.7	96.5	107.5	110.2	111.7
Domestic interbank, foreign government, and other banks in foreign countries ⁷ ¹⁰	(NA)	77.7	84.2	77.5	70.8	55.6	64.0	77.1	84.4
Miscellaneous liabilities.....	101.6	260.4	315.4	351.5	352.0	381.4	414.8	458.4	466.9
Subordinated notes and debentures.....	4.4	6.5	6.5	7.3	7.1	10.2	14.7	16.0	17.6
Limited-life preferred stock.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	14.0	.1	.1
Equity capital.....	64.3	107.6	118.3	128.9	140.5	154.3	169.5	182.3	181.4

NA Not available. ¹ Book value. Includes other categories not shown separately. ² Beginning 1984, nonrated industrial development and other obligations of States and political subdivisions are included under all other loans. ³ Under agreements to resell. ⁴ Excludes allowance for loan and lease losses and unearned income. ⁵ Includes loans to foreign banks. ⁶ Includes reserves on loans and securities, not shown separately. ⁷ Represents deposits in domestic offices only. ⁸ Beginning 1984, noninterest bearing deposits. ⁹ Beginning 1984, interest bearing deposits. ¹⁰ Includes official institutions in foreign countries.

Source: U.S. Federal Deposit Insurance Corporation, *Assets and Liabilities: Commercial and Mutual Savings Banks*, semiannual; beginning 1980, *Annual Report*; and unpublished data.

NO. 798. INSURED COMMERCIAL BANKS—SELECTED MEASURES OF FINANCIAL CONDITION: 1975 TO 1987

[As of December 31. Capital figures exclude reserves for possible loan losses]

ITEM	Unit	1975	1980	1981	1982	1983	1984	1985	1986	1987
Number of banks.....	Number	14,384	14,434	14,414	14,452	14,465	14,481	14,404	14,200	13,699
Equity and debt capital ¹	Bil. dol.	70.3	114.1	124.8	136.2	147.8	164.5	198.2	199.3	199.1
Equity capital to total assets.....	Percent	6.1	5.8	5.8	5.9	6.0	6.2	6.2	6.2	6.0
Equity capital to total deposits.....	Percent	8.5	7.3	7.4	7.8	7.8	7.9	8.0	8.0	7.8
Debt capital to total capital ¹	Percent	6.3	5.7	5.2	5.4	4.8	6.2	14.5	8.5	8.9
Total capital to total assets.....	Percent	6.5	6.2	6.2	6.2	6.3	6.8	6.7	6.8	6.6
Total capital to total liabilities.....	Percent	6.8	6.8	6.8	6.6	6.7	7.0	7.2	7.3	7.1
Total capital to risk assets ²	Percent	9.0	8.4	8.2	8.2	8.4	8.5	9.1	8.7	8.5
Total loans, excluding Federal funds ³	Bil. dol.	579.4	1,002.5	1,131.3	1,224.4	1,316.9	1,508.3	1,630.8	1,756.6	1,829.3
Total loans to deposits.....	Percent	63.4	67.7	71.2	71.7	71.5	76.9	77.0	76.9	78.3
Net loan charge-offs to average total loans.....	Percent	.61	.38	.36	.56	.68	.76	.84	.98	.93
Aggregate net operating income.....	Mil. dol.	7,146	14,484	15,600	15,587	14,907	15,540	16,287	13,314	1,953
Aggregate net income to average equity capital.....	Percent	11.7	13.7	13.1	12.1	11.1	10.7	11.3	10.0	2.0
Aggregate net income to average assets.....	Percent	.78	.78	.77	.72	.66	.65	.70	.63	.12

¹ Beginning 1985 includes limited life preferred stock as debt capital. ² Risk assets are total assets less cash, U.S. Government securities, and Federal funds sold. ³ Beginning in 1984, some assets previously classified as securities are included among loans.

Source: U.S. Federal Deposit Insurance Corporation, *The Condition of the Financial System*, May 1980, and unpublished data.

Banks Closed—Foreign Banks—Largest Banks

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No. 799. FDIC-INSURED BANKS CLOSED OR ASSISTED DUE TO FINANCIAL DIFFICULTIES, AND PROBLEM BANKS: 1971 TO 1987

[Banks are closed either permanently or temporarily by order of supervisory authorities or by directors of banks. F.D.I.C.=Federal Deposit Insurance Corporation. See *Historical Statistics, Colonial Times to 1970*, series X 741, 748, 756, and 761.]

ITEM	Unit	1971-1980	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Total banks closed or assisted.....	Number.	84	7	10	11	10	42	48	80	120	145	203
Agricultural banks ¹	Number.	(NA)	(NA)	(NA)	(NA)	(NA)	7	7	31	62	59	57
Deposits, closed and assisted banks.....	Mil. dol.	10,851	854	111	5,216	3,826	9,908	5,442	29,883	8,059	8,587	8,568
Agricultural banks ¹	Mil. dol.	(NA)	(NA)	(NA)	(NA)	(NA)	7	112	114	421	866	1,408
Problem banks ²	Number.	(X)	342	217	223	369	642	848	1,140	1,484	1,575	

NA. Not available. X. Not applicable. ¹ Banks with at least 25 percent of their portfolios devoted to farm loans.

² FDIC-insured commercial and savings banks considered to be problem banks by the supervisory authorities, end-of-period.

Source: U.S. Federal Deposit Insurance Corporation, *Annual Report*, and unpublished data.

No. 800. U.S. BANKING OFFICES OF FOREIGN BANKS—SUMMARY: 1975 TO 1987

[In billions of dollars, except as indicated. As of December, except as indicated. Covers agencies, branches, subsidiary commercial banks, New York State investment companies, and, for data by country only, finance companies]

YEAR	Assets	LOANS		Depos- its	COUNTRY	NUMBER OF—		Assets	Loans, com- mercial and industri- al	Depos- its
		Total	Business			Banks with U.S. offices	U.S. offices			
1975.....	52.4	29.9	19.9	22.6	1987, total ²	266	664	571.9	138.5	314.0
1980.....	200.6	121.4	59.6	80.4	Japan.....	30	99	275.3	61.6	149.6
1981.....	250.6	157.7	73.6	101.8	Canada.....	6	51	46.0	13.2	22.3
1982.....	299.8	185.2	82.4	154.3	United Kingdom.....	12	47	41.0	13.9	28.7
1983.....	328.8	192.4	84.5	181.3	Italy.....	12	25	37.7	8.0	15.7
1984.....	394.4	220.1	97.8	233.7	Hong Kong.....	11	32	26.2	7.6	20.1
1985.....	440.8	247.4	108.8	236.7	France.....	15	41	26.0	5.9	15.3
1986.....	524.3	276.9	126.8	278.2	Switzerland.....	7	16	24.2	5.5	9.6
1987.....	592.6	310.9	147.9	316.1	West Germany.....	13	22	11.6	2.5	7.0
SHARE ¹					Israel.....	4	22	10.0	3.1	8.5
					Netherlands.....	4	17	8.3	2.4	4.4
1975.....	5.3	5.7	10.4	2.9						
1980.....	11.9	13.4	18.2	6.6						
1985.....	16.1	15.4	22.5	12.1						
1987.....	19.0	16.6	26.4	14.1						

¹ Percent of "domestically owned" commercial banks plus U.S. offices of foreign banks. Countries not shown separately. Source: *American Banker*, New York, NY, selected issues.

² As of June 30. Includes other countries not shown separately. Source: *American Banker*, New York, NY, selected issues.

Source: Except as noted, Board of Governors of the Federal Reserve System, unpublished data.

No. 801. 500 LARGEST BANKS IN THE WORLD—NUMBER AND DEPOSITS, BY LOCATION OF BANK: 1970 TO 1987

[Deposits in billions of dollars, except percent. Data cover U.S. commercial banks and foreign banks that conduct a commercial banking business; beginning 1983, includes U.S. and foreign savings banks. Beginning 1981, covers top 500 banks in assets available. Number of banks includes banks more than 50 percent owned by other banks. To avoid double-counting of deposits, banks more than 50 percent owned by other banks are excluded from deposit totals if their parent bank consolidates their deposits]

LOCATION OF BANK	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	PERCENT		
											1970	1980	1987
NUMBER													
U.S. banks.....	185	137	93	97	102	115	110	102	90	37.0	18.6	18.0	
Foreign banks.....	315	363	407	403	403	398	395	398	410	63.0	81.4	82.0	
DEPOSITS													
Total.....	890	2,176	4,994	5,213	5,230	5,683	5,854	7,022	9,220	12,090	100.0	100.0	
U.S. banks.....	298	494	754	806	794	882	961	1,014	1,084	1,108	33.3	15.1	9.2
Foreign banks.....	594	1,682	4,240	4,407	4,436	4,801	4,893	6,008	8,136	10,982	66.7	84.9	90.8

Source: *American Banker*, New York, NY, selected July issues.

No. 802. FOREIGN BRANCHES OF U.S. FEDERAL RESERVE MEMBER BANKS—NUMBER AND ASSETS: 1970 TO 1987

[As of year end. The foreign branch activities of nonmember banks are not significant]

ITEM	Unit	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987, prel.
Member banks operating foreign branches.....	Number...	79	126	159	159	162	166	163	162	151	153
Foreign branches	Number...	532	762	787	841	900	892	905	916	899	902
Assets of foreign branches ^{1,2}	Bil. dol....	50	145	311	343	341	333	291	290	285	300
Percent of total assets of all insured commercial banks ³	Percent...	7.3	13.1	16.3	16.1	14.2	11.9	10.3	8.9	8.0	8.1
Assets of branches in United Kingdom ¹	Bil. dol....	24	67	107	112	111	132	87	94	82	85
Assets of branches in The Bahamas and Cayman Islands ¹	Bil. dol....	4	37	93	105	101	117	86	77	82	86

¹ Data exclude claims on other foreign branches of the same bank. ² Includes assets of foreign branches in countries in addition to those shown separately. ³ Percentages reflect adjustments to exclude foreign branch claims on the U.S. offices of their parent banks.

Source: Board of Governors of the Federal Reserve System, unpublished data.

No. 803. FOREIGN LENDING BY LARGE U.S. BANKS, BY MATURITY, TYPE OF BORROWER, AND COUNTRY: 1987

[In millions of dollars, except percent. As of December. Covers 184 U.S. banking organizations which do nearly all of the foreign lending in the country. Data represent claims on foreign residents and institutions held at all domestic and foreign offices of covered banks. Data cover only cross-border and non-local currency lending. These result from a U.S. bank's office in one country lending to residents of another country or lending in a currency other than that of the borrower's country. Excludes local currency loans and other claims and local currency liabilities held by banks' foreign offices on residents of the country in which the office was located (e.g. Deutsche mark loans to German residents booked at the German branch of the reporting U.S. bank)]

COUNTRY	CLAIMS		Bank borrow- ers	Public borrow- ers	COUNTRY	CLAIMS		Bank borrow- ers	Public borrow- ers
	Total ¹	Per- cent short- term ²				Total ¹	Per- cent short- term ²		
Total ³	267,312	67	129,481	76,357	Italy.....	5,999	78	4,351	1,056
Algeria.....	811	31	406	335	Japan.....	21,732	86	16,210	391
Argentina.....	8,812	36	942	6,384	Mexico.....	22,722	25	2,625	15,602
Australia.....	3,111	71	849	205	Morocco.....	820	56	285	520
Austria.....	1,905	87	1,017	231	Netherlands.....	3,054	74	1,591	295
Bahamas, The.....	4,144	91	3,859	7	New Zealand.....	988	50	229	184
Belgium-Luxembourg.....	9,098	94	7,733	433	Nigeria.....	901	53	192	678
Brazil.....	21,275	50	4,271	14,151	Norway.....	2,086	56	663	102
British West Indies.....	10,070	96	9,658	82	Panama.....	1,359	64	260	432
Canada.....	8,330	64	3,572	767	Peru.....	901	86	132	886
Chile.....	5,999	42	1,405	4,133	Philippines.....	4,674	35	479	3,146
China:					Singapore.....	5,735	94	4,778	56
Taiwan.....	4,755	94	2,570	227	South Africa.....	2,888	59	1,918	537
Colombia.....	2,068	35	533	1,156	South Korea.....	3,849	78	1,470	528
Denmark.....	2,294	72	1,044	533	Spain.....	2,864	62	1,224	477
Ecuador.....	1,919	46	37	1,797	Sweden.....	2,274	87	1,542	311
Finland.....	1,179	82	867	120	Switzerland.....	4,654	87	2,521	28
France.....	9,330	83	7,112	1,389	Thailand.....	816	80	484	44
Greece.....	1,951	41	60	655	Turkey.....	2,108	64	548	1,369
Hong Kong.....	8,251	90	6,024	66	United Kingdom.....	38,249	90	27,320	376
India.....	989	66	424	315	Uruguay.....	940	28	26	836
Indonesia.....	1,522	57	55	534	Venezuela.....	8,320	30	1,280	5,908
Ireland.....	903	38	200	270	West Germany.....	5,124	54	1,668	1,520
Israel.....	1,011	64	612	227	Yugoslavia.....	1,915	34	313	1,571

¹ Includes private nonbank borrowers, not shown separately. ² Maturity, one year or less. ³ Includes countries not shown separately.

Source: Board of Governors of the Federal Reserve System, Federal Financial Institutions Examination Council, statistical release.

No. 804. FEDERAL AND STATE-CHARTERED CREDIT UNIONS—SUMMARY: 1970 TO 1987

[As of December 31. Federal data include District of Columbia, Puerto Rico, Canal Zone, Guam, and Virgin Islands. Beginning 1984, excludes State-insured and non-insured State-chartered credit unions and corporate central credit unions which have mainly other credit unions as members. See also *Historical Statistics, Colonial Times to 1970*, series X 864-878]

YEAR	OPERATING CREDIT UNIONS		MEMBERS (1,000)		ASSETS (mil. dol.)		LOANS OUTSTANDING (mil. dol.)		SAVINGS (mil. dol.)	
	Federal	State	Federal	State	Federal	State	Federal	State	Federal	State
1970.....	12,977	10,679	11,966	10,853	8,881	9,089	6,989	7,137	7,629	7,857
1975.....	12,737	9,871	17,066	14,196	20,209	17,804	14,869	13,300	17,530	15,522
1980.....	12,440	9,025	24,519	19,235	40,092	33,143	26,350	22,633	36,263	29,480
1984.....	10,548	4,645	28,170	15,205	63,657	29,188	42,132	19,951	57,927	26,327
1985.....	10,125	4,920	29,576	15,689	78,205	41,525	49,241	26,168	71,616	37,917
1986.....	9,758	4,935	31,045	17,363	95,484	52,244	55,305	30,934	87,954	48,097
1987.....	9,401	4,834	32,057	17,999	105,190	56,972	64,104	35,436	96,346	52,083

Source: National Credit Union Administration, *Annual Report of the National Credit Union Administration*, and unpublished data.

NO. 805. SAVINGS INSTITUTIONS—FINANCIAL SUMMARY BY TYPE: 1970 TO 1987

[In billions of dollars, except number of institutions. As of December 31. Includes Puerto Rico, Guam, and Virgin Islands. FSLIC=Federal Savings and Loan Insurance Corporation. FDIC=Federal Deposit Insurance Corporation. See also *Historical Statistics, Colonial Times to 1970*, series X 834-844]

TYPE OF INSTITUTION	1970	1975	1980	1982	1983	1984	1985	1986	1987
NUMBER OF INSTITUTIONS									
Savings Institutions, total	6,162	5,406	5,078	4,248	4,036	3,978	3,940	3,970	3,892
Savings and loan associations	5,689	4,931	4,813	3,825	3,502	3,393	3,197	3,079	2,909
FSLIC-insured	4,365	4,078	4,002	3,343	3,040	2,938	2,907	2,812	2,548
State insured and non-insured	1,304	853	611	483	462	455	290	267	251
Savings banks	493	475	463	423	534	585	743	891	983
FSLIC-insured	(X)	(X)	3	6	143	198	339	409	499
FDIC-insured	328	328	323	315	294	291	392	482	484
Federally chartered	(X)	(X)	(X)	(X)	18	24	26	27	22
State chartered	328	328	323	315	276	267	364	455	462
State insured and non-insured	165	147	137	102	97	96	12	—	—
FSLIC-insured institutions	4,365	4,078	4,005	3,349	3,183	3,136	3,246	3,221	3,147
FDIC-insured institutions	328	328	323	315	294	291	392	482	484
State insured and non-insured	1,469	1,000	748	585	559	551	302	267	261
ASSETS									
Savings Institutions, total	255.3	459.4	796.6	892.2	1,034.0	1,208.1	1,315.4	1,423.7	1,523.4
Savings and loan associations	176.1	338.3	629.8	707.6	773.4	903.5	948.8	983.3	977.2
FSLIC-insured	170.6	330.3	618.5	692.7	754.2	880.0	938.1	953.6	868.6
State insured and non-insured	5.5	8.0	11.2	15.1	19.2	23.5	10.7	9.7	10.6
Savings banks	79.2	121.1	168.8	184.4	260.8	304.8	386.6	460.4	546.2
FSLIC-insured	(X)	(X)	2.2	6.9	65.0	98.4	131.6	210.3	284.3
FDIC-insured	66.7	107.3	182.6	155.3	170.7	179.1	205.4	250.1	281.9
Federally chartered	(X)	(X)	(X)	(X)	36.7	43.5	48.0	52.4	44.8
State chartered	66.7	107.3	152.6	155.3	134.0	135.6	157.4	197.7	217.1
State insured and non-insured	10.5	13.8	12.0	22.2	24.9	27.1	29.8	—	—
FSLIC-insured institutions	170.6	330.3	620.6	689.5	819.2	978.5	1,069.4	1,163.9	1,250.9
FDIC-insured institutions	66.7	107.3	152.6	155.3	170.7	179.1	205.4	250.1	281.9
State insured and non-insured	16.0	21.8	23.2	37.3	44.1	50.6	40.3	9.7	10.6
MORTGAGE LOANS OUTSTANDING¹									
Savings Institutions, total	208.2	355.9	603.7	584.8	633.7	717.9	777.6	800.7	838.5
Savings and loan associations	150.3	278.6	502.8	483.8	494.8	555.3	583.2	555.9	538.8
FSLIC-insured	146.0	272.5	484.2	473.7	482.6	541.6	576.8	549.6	533.0
State insured and non-insured	4.3	6.1	9.0	10.0	12.2	19.7	6.9	6.3	5.8
Savings banks	57.9	77.2	100.9	100.9	138.9	182.6	194.4	244.8	299.7
FSLIC-insured	(X)	(X)	.7	3.4	38.7	56.9	73.0	113.3	156.1
FDIC-insured	50.7	68.4	91.6	85.1	87.5	92.1	106.1	131.5	143.6
Federally chartered	(X)	(X)	(X)	(X)	19.6	22.2	24.3	25.8	24.2
State chartered	50.7	68.4	91.6	85.1	67.9	69.9	81.8	105.7	119.4
State insured and non-insured	7.2	8.8	8.3	12.4	12.7	13.6	15.3	—	—
FSLIC-insured institutions	146.0	272.5	494.9	477.0	521.3	599.0	649.8	662.9	669.1
FDIC-insured institutions	50.7	68.4	91.6	85.1	87.5	92.1	106.1	131.5	143.6
State insured and non-insured	11.5	15.0	25.0	22.4	24.9	27.3	22.2	6.3	5.8
DEPOSITS									
Savings Institutions, total	216.8	396.4	673.5	733.2	863.7	988.3	1,058.3	1,098.0	1,145.0
Savings and loan associations	146.7	285.7	511.0	568.0	634.5	725.0	760.1	741.5	737.3
FSLIC-insured	141.7	278.8	501.2	554.6	617.8	705.2	740.5	732.9	729.4
State insured and non-insured	5.0	7.0	9.8	13.4	16.6	19.9	9.8	8.6	7.9
Savings banks	72.1	110.6	182.5	185.2	229.3	283.5	308.2	356.5	407.7
FSLIC-insured	(X)	(X)	1.9	5.9	53.2	79.6	103.5	157.7	203.2
FDIC-insured	62.7	98.1	149.9	139.5	153.8	159.8	178.6	198.8	204.5
Federally chartered	(X)	(X)	(X)	(X)	33.0	38.3	39.8	39.3	30.7
State chartered	62.7	98.1	149.9	139.5	120.8	121.5	138.8	159.5	173.8
State insured and non-insured	9.4	12.5	10.7	19.8	22.3	24.1	26.1	—	—
FSLIC-insured institutions	141.7	278.8	503.2	560.5	671.0	784.7	843.9	890.8	892.6
FDIC-insured institutions	62.7	98.1	149.9	139.5	153.8	159.8	178.6	188.8	204.5
State insured and non-insured	14.4	19.5	21.1	33.2	38.9	44.0	35.7	8.6	7.9

- Represents zero. X Not applicable. ¹Beginning 1982, reflects deductions from asset accounts.

Source: U.S. Federal Home Loan Bank Board, Washington, DC, *Savings and Home Financing Source Book*, annual, and unpublished data.

No. 806. SAVINGS INSTITUTIONS (FSLIC-INSURED)—SELECTED FINANCIAL ITEMS AND RATIOS OF CONDITION: 1970 TO 1987

[As of Dec. 31 for assets, liabilities and net worth; calendar year for other items. Includes Puerto Rico, Guam, and Virgin Islands. FSLIC—Federal Savings and Loan Insurance Corporation. Beginning 1983, includes FSLIC-insured savings and loan associations which changed to FSLIC-insured savings banks. Minus sign (—) indicates either loss or outflow]

ITEM	Unit	1970	1975	1980	1982	1983	1984	1985	1986	1987
Assets ¹	Bil. dol.	170.6	330.3	620.6	699.5	819.2	978.5	1,069.4	1,163.9	1,250.9
Mortgage assets ²	Bil. dol.	146.0	272.5	494.9	477.0	521.3	599.0	649.8	662.9	689.1
Mortgage-backed securities	Bil. dol.	(NA)	(NA)	27.3	62.8	90.9	108.2	110.7	158.2	201.8
Cash and securities	Bil. dol.	15.8	29.8	57.0	84.4	109.9	135.6	143.1	165.0	170.1
Liabilities ¹	Bil. dol.	158.7	311.1	588.0	679.8	786.2	940.6	1,022.6	1,111.6	1,204.5
Deposit accounts	Bil. dol.	141.7	278.8	503.2	560.5	671.0	784.7	843.8	890.6	932.6
FHLB advances	Bil. dol.	10.5	17.5	47.0	33.8	41.3	65.4	84.4	100.0	116.4
Other borrowed money	Bil. dol.	.3	3.0	17.2	25.7	33.0	37.9	72.2	98.9	133.6
Net worth	Bil. dol.	11.9	19.2	32.6	25.7	33.0	37.9	46.8	52.3	46.4
Net worth to total assets ratio	Ratio	7.0	5.8	5.2	3.7	4.0	3.8	4.4	4.6	3.7
Operating income ³	Bil. dol.	10.7	23.7	56.1	71.5	80.0	100.6	110.5	110.8	107.6
Operating expenses ³	Bil. dol.	1.9	3.9	7.9	10.1	12.3	15.3	19.5	22.9	24.3
Interest on savings deposits ³	Bil. dol.	6.9	16.0	41.6	58.6	58.3	71.8	73.5	68.0	62.4
Interest on borrowed money ³	Bil. dol.	.8	1.6	5.8	11.7	8.4	12.6	14.1	15.4	17.9
Net income before taxes ³	Bil. dol.	1.2	2.1	1.2	—5.9	2.8	1.9	6.0	9.3	—4.1
Net income after taxes ³	Bil. dol.	.9	1.4	.8	—4.3	2.0	1.1	3.8	.1	—6.8
Net deposit gain	Bil. dol.	10.8	42.1	41.0	37.3	110.2	111.2	54.9	55.1	46.6
Net new deposits received	Bil. dol.	5.3	29.3	10.7	—6.4	63.2	56.9	—1.5	3.2	—1.6
Mortgage loans closed ⁴	Bil. dol.	(NA)	(NA)	85.2	80.5	151.1	181.3	198.7	284.9	253.4
Purchase of 1-to-4 family homes	Bil. dol.	(NA)	(NA)	60.0	34.2	83.8	95.7	107.8	170.5	173.1
Average cost of funds	Percent	5.30	6.32	8.94	11.98	9.83	10.03	9.20	8.06	7.20
Average effective dividend rate paid	Percent	5.14	6.21	8.78	11.19	9.71	9.93	9.03	7.84	6.92
Average interest return on mortgages	Percent	6.56	7.71	9.94	10.88	11.17	11.86	11.53	10.85	9.70
Net after taxes income to average assets	Percent	.57	.47	.13	—.65	.27	.13	.38	.09	—.58

NA Not available. ¹Includes other items, not shown separately. ²Beginning 1982, reflects deductions from asset accounts.

³Source: United States League of Savings Institutions, Washington, DC, *Savings Institutions Sourcebook*, annual.

⁴Reported on a gross basis including refinancing and combination construction-purchase loan.

Source: Except as noted, U.S. Federal Home Loan Bank Board, *Savings and Home Financing Source Book*, annual.

No. 807. SAVINGS INSTITUTIONS (FSLIC-INSURED)—SELECTED FINANCIAL ITEMS, STATES AND OTHER AREAS: 1987

[In billions of dollars, except number of institutions. As of December 31. Covers savings and loan associations and savings banks]

DIVISION AND STATE	NUMBER OF INSTITUTIONS		Assets	Deposits	DIVISION AND STATE	NUMBER OF INSTITUTIONS		Assets	Deposits	DIVISION AND STATE	NUMBER OF INSTITUTIONS	
	Total	Insolvent				Total	Insolvent				Total	Insolvent
Total	3,147	349	1,250.9	932.6	W. No. Cent.	263	31	86.5	81.5	W. So. Cent.	465	168
U.S.	3,134	349	1,244.5	928.8	MN	36	6	16.3	11.1	AR	37	12
N. Eng.	97	1	30.2	20.8	IA	50	8	8.7	7.4	LA	96	18
ME	15	—	1.5	1.2	ND	6	—	4.2	2.5	OK	53	18
NH	12	—	2.0	1.6	SD	12	1	1.4	1.3	TX	279	110
VT	4	—	.5	.4	NE	23	4	11.4	7.4	Mt.	120	18
MA	34	—	9.4	6.6	KS	55	8	20.5	13.3	ID	11	1
RI	4	—	4.1	2.7	DE	4	—	4.4	3	WY	11	2
CT	28	1	12.7	8.4	So. Atl.	593	32	182.9	140.3	CO	36	6
Mid. Atl.	392	8	151.8	117.1	MD	96	2	21.0	16.4	NM	25	5
NY	86	—	55.8	43.4	DC	6	—	4.4	2.8	AZ	12	1
NJ	137	7	53.1	40.9	VA	86	6	25.6	19.4	UT	13	2
PA	169	1	42.7	32.8	WV	16	2	2.0	1.8	NV	5	—
E. No. Cent.	726	46	188.9	145.6	NC	137	1	20.2	16.8	Pac.	270	36
OH	224	6	52.8	43.4	SC	49	—	10.9	8.8	WA	39	4
IN	112	10	13.7	11.7	GA	69	4	18.2	13.7	17.5	11.7	
IL	264	23	68.8	55.2	FL	148	17	80.1	60.5	OR	16	5
MI	51	5	37.2	21.2	E. So. Cent.	208	17	33.1	26.7	CA	206	29
WI	75	2	16.4	14.1	KY	67	3	7.5	6.3	AK	3	—
					TN	63	6	11.5	9.2	HI	6	5.5
					AL	36	3	9.0	6.5	VI	1	—
					MS	42	5	5.1	4.2	(Z)	(Z)	3.8

- Represents zero. Z Less than \$50 million.

Source: U.S. Federal Home Loan Bank Board, *Savings and Home Financing Source Book*, annual.

Mortgage Debt Outstanding

497

NO. 808. MORTGAGE DEBT OUTSTANDING, BY TYPE OF PROPERTY AND HOLDER: 1970 TO 1987

[In billions of dollars. As of Dec. 31. Includes Puerto Rico and Guam. See also *Historical Statistics, Colonial Times to 1970*, series N 273 and N 276]

TYPE OF PROPERTY AND HOLDER	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
Mortgage debt, total.....	474	792	1,327	1,457	1,563	1,632	1,815	2,035	2,269	2,569	2,908
Residential nonfarm.....	358	583	1,005	1,106	1,180	1,220	1,351	1,504	1,681	1,915	2,162
1- to 4-family homes.....	297	482	871	984	1,038	1,074	1,190	1,319	1,467	1,668	1,888
Savings institutions.....	187	274	460	487	501	458	482	529	554	558	598
Mortgage pools or trusts ¹	3	28	101	122	142	193	259	304	383	520	654
Government National Mortgage Assoc.....	(2)	18	74	92	103	116	156	176	207	257	310
Federal Home Loan Mortgage Corp.....	-	1	12	13	20	43	57	70	100	167	206
Commercial banks.....	42	77	148	160	170	174	183	196	213	236	275
Individuals and others ²	40	44	79	101	122	136	144	154	166	181	183
Federal and related agencies.....	22	38	53	61	68	78	87	98	110	127	124
Federal National Mortgage Assoc.....	15	28	45	52	56	67	73	82	92	91	90
Finance companies.....	-	4	11	14	17	19	21	24	29	34	40
Life insurance companies.....	27	18	16	18	17	17	15	14	12	13	13
5 or more units.....	60	101	135	142	142	146	161	186	214	247	274
Commercial.....	86	159	236	255	278	302	352	419	482	557	656
Farm.....	30	50	86	96	106	110	113	112	106	97	90
TYPE OF HOLDER											
Savings institutions.....	208	356	575	603	620	578	627	710	761	777	856
Commercial banks.....	73	136	245	263	284	301	331	379	429	503	591
Life insurance companies.....	74	89	118	131	139	142	151	157	172	194	212
Finance companies.....	1	4	11	14	17	19	21	24	29	34	40
Individuals and others ²	79	109	162	190	216	236	253	274	297	326	345
Mortgage pools or trusts ¹	5	34	119	142	163	217	285	332	415	532	670
Government National Mortgage Assoc.....	(2)	18	76	94	106	119	160	180	212	283	318
Federal Home Loan Mortgage Corp.....	-	2	15	17	20	43	58	71	100	171	213
Federal National Mortgage Association.....	-	-	-	-	1	14	25	36	55	97	140
Farmers Home Administration ³	4	14	28	32	37	40	42	45	48	(2)	(2)
Federal and related agencies.....	34	67	97	115	126	139	148	159	167	204	193
Federal National Mortgage Association.....	16	32	51	57	61	72	78	88	98	98	97
Farmers Home Administration ³	2	1	1	3	2	2	1	1	48	48	43
Federal Land Banks.....	7	17	31	38	47	51	52	52	47	40	34
Federal Home Loan Mortgage Corp.....	(2)	5	4	5	5	5	8	10	14	12	13
Federal Housing and Veterans Admin.....	(2)	4	5	6	6	5	5	5	5	5	6
Government National Mortgage Assoc.....	5	7	4	5	5	4	3	2	1	1	(z)

- Represents zero. Z Less than \$500 million. ¹ Outstanding principal balances of mortgage pools backing securities insured or guaranteed by the agency indicated. ² Includes mortgage companies, real estate investment trusts, state and local retirement funds, noninsured pension funds, credit unions, and other U.S. agencies. ³ FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986 because of accounting changes by the Farmers Home Administration.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly.

NO. 809. HOLDINGS OF CONSTRUCTION, LONG-TERM MORTGAGE, AND LAND LOANS, BY TYPE OF LOAN, 1970 TO 1987, AND BY LENDER, 1987

[In billions of dollars. As of end of year]

TYPE OF LOAN	1970	1975	1980	1984	1985	1986	Total ¹	1987					
								Lender					
								Sav- ings and loan assn.	Com- mer- cial banks	Mutual sav- ings banks	Life insur- ance com- pa- nies	Feder- al credit agencies	Mort- gage pools
Mortgage credits, total.....	422	731	1,318	1,887	2,059	2,373	2,693	731	583	119	209	165	688
Construction loans.....	18	41	63	146	152	173	196	53	120	8	1	1	-
1-4 unit family homes.....	5	13	26	39	34	36	39	19	17	2	-	1	-
Multifamily residential.....	6	12	14	26	28	37	42	15	16	3	(z)	1	-
Nonresidential.....	7	17	22	81	90	100	115	19	87	3	1	-	-
Farm properties.....	(z)	-	-	-	-	-	-	-	-	-	-	-	
Long-term mortgage loans.....	400	679	1,242	1,711	1,872	2,160	2,444	650	438	111	208	164	688
1-4 unit family homes.....	287	435	857	1,183	1,294	1,507	1,712	477	248	78	13	108	664
FHA insured.....	62	88	105	155	176	221	246	4	9	5	2	10	204
VA guaranteed.....	37	57	91	120	127	135	139	8	5	5	1	4	111
Conventional.....	168	310	661	908	991	1,151	1,327	465	234	69	10	94	348
Multifamily.....	46	82	114	146	161	190	207	71	17	13	22	26	15
Nonresidential.....	66	128	205	298	398	393	466	102	159	19	163	6	(z)
Farm properties.....	20	34	68	84	79	70	58	-	14	-	10	24	9
Land loans.....	4	11	13	29	36	40	54	28	25	1	1	-	-

- Represents zero. Z Less than \$500 million. ¹ Includes other lenders not shown separately.

Source: U.S. Dept. of Housing and Urban Development, *The Supply of Mortgage Credit, 1970-1979*; and monthly and quarterly press releases based on Survey of Mortgage Lending Activity.

NO. 810. MORTGAGE ACTIVITY BY LENDER: 1970 TO 1987

[In billions of dollars. Loans outstanding are as of end of year. Bank and savings and loan data include Puerto Rico. See also *Historical Statistics, Colonial Times to 1970*, series N 268-267, X 836-839, and X 911.]

ITEM	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
Savings and loan associations:											
Loans acquired ¹	22.0	58.3	104.6	81.7	58.5	67.2	148.9	184.2	210.6	289.6	275.0
Loans outstanding ²	150.3	278.6	475.8	502.8	517.9	492.2	512.9	641.4	658.2	667.0	731.3
FHA-insured	10.2	16.5	13.0	12.8	12.0	12.1	12.8	12.3	11.1	8.8	5.0
VA-guaranteed	8.5	14.0	15.8	15.0	14.2	14.0	15.5	15.0	13.7	11.1	7.8
Conventional	131.7	248.0	447.2	475.0	491.7	466.1	484.6	614.1	633.4	647.1	718.6
Commercial banks: ⁴											
Loans outstanding	73.3	136.2	243.8	262.3	282.7	299.0	328.0	374.8	425.3	497.9	582.5
Nonfarm residential	45.6	82.9	158.1	170.2	181.7	185.6	186.2	212.9	229.2	259.7	297.1
FHA-insured	7.9	6.3	4.8	4.4	4.5	4.6	5.6	5.8	5.7	7.0	8.8
VA-guaranteed	2.6	3.1	2.7	2.4	2.4	2.7	3.1	3.0	3.3	4.1	5.3
Conventional	35.1	73.5	150.6	183.3	174.7	178.2	187.5	204.1	220.2	248.6	283.0
Other nonfarm	23.3	46.9	77.1	83.5	92.7	105.1	122.4	151.3	184.8	225.4	270.9
Farm	4.4	6.4	8.6	8.5	8.3	8.4	9.3	10.5	11.4	12.8	14.5
Life insurance companies:											
Loans acquired ¹	6.6	8.8	19.6	18.3	13.0	10.0	18.8	18.2	31.7	40.8	39.5
Nonfarm	6.3	7.7	16.8	16.5	11.8	9.3	17.6	18.2	30.6	39.4	38.5
Farm	.3	1.1	2.8	1.8	1.2	.7	1.2	1.0	1.1	1.2	1.0
Loans outstanding	74.4	89.2	115.1	127.9	135.6	138.5	148.4	154.5	167.9	190.4	209.3
Nonfarm	68.7	82.4	103.0	112.5	122.5	125.7	135.7	142.1	156.1	179.4	199.4
FHA-insured	11.4	7.9	5.8	5.5	5.1	4.8	4.4	4.1	3.2	2.7	2.1
VA-guaranteed	5.4	3.9	3.0	2.8	2.6	2.5	2.3	2.0	1.5	1.2	1.0
Conventional	51.9	70.6	94.2	106.7	114.8	118.4	129.0	138.0	151.4	175.5	198.3
Farm	5.6	6.8	12.2	12.8	13.1	12.8	12.7	12.4	11.8	11.0	9.8

¹ Mortgage loans on all types of property acquired either by origination or purchase. Long term loans only, excluding construction and land loans. ² Includes Guam. ³ Includes shares pledged against mortgage loans, junior liens and real estate sold on contract. ⁴ Includes loans held by nondeposit trust companies; excludes holdings of trust departments of commercial banks.

Source: U.S. Dept. of Housing and Urban Development, *The Supply of Mortgage Credit, 1970-1979*; and monthly and quarterly press releases based on the Survey of Mortgage Lending Activity.

NO. 811. PURCHASES AND SALES OF MORTGAGE LOANS, BY LENDER: 1970 TO 1987

[In billions of dollars. Covers all types of property]

LENDER	PURCHASES					SALES				
	1970	1980	1985	1986	1987	1970	1980	1985	1986	1987
Total	16.4	78.1	257.7	497.9	462.3	16.9	77.1	224.3	418.5	365.3
Savings associations ¹	3.7	13.2	65.0	71.3	64.6	1.0	16.1	103.2	164.8	123.6
Savings banks	1.8	1.2	2.9	3.4	3.5	.3	.8	6.0	13.0	12.9
Commercial banks	.8	4.9	12.0	42.8	58.2	2.0	8.4	19.2	40.1	52.8
Mortgage companies	.1	3.4	20.9	55.2	60.1	12.5	37.0	78.0	181.2	186.5
Federal credit agencies	5.7	16.3	33.0	39.5	25.2	2.6	10.5	8.0	15.9	7.2
Mortgage pools	2.7	29.4	114.3	280.4	230.6	.3	4.1	5.5	1.4	.3
Other	1.6	9.7	9.6	25.3	30.2	.3	.3	4.4	2.3	2.3

¹ Includes Federal savings banks insured by the Federal Savings and Loan Insurance Corporation.

Source: United States League of Savings Institutions, Washington, DC, *Savings Institutions Sourcebook*, annual. Data from U.S. Department of Housing and Urban Development.

NO. 812. MORTGAGE DELINQUENCY AND FORECLOSURE RATES AND PRIVATE AND GOVERNMENT MORTGAGE INSURANCE: 1970 TO 1987

[In percent, except as indicated. Covers one- to four-family residential nonfarm homes]

ITEM	1970	1975	1980	1983	1984	1985	1986	1987
Delinquency rates: ¹								
Total	3.18	4.37	4.97	5.69	5.66	5.84	5.56	4.97
Conventional loans	1.74	2.71	3.09	3.89	3.85	4.05	3.80	3.15
VA loans	3.03	4.17	5.33	6.09	6.38	6.63	6.58	6.21
FHA loans	3.65	5.45	6.56	7.07	7.28	7.46	7.17	6.56
Foreclosure rates: ²								
Total	.33	.38	.38	.67	.73	.81	.98	1.06
Conventional loans	.08	.16	.17	.46	.47	.61	.69	.67
VA loans	.50	.36	.46	.76	.82	.88	1.14	1.28
FHA loans	.40	.48	.53	.84	.98	1.01	1.22	1.44
Claims paid by private mortgage insurers ³ (mil. dol.)	(NA)	(NA)	58.7	366.8	472.1	971.1	1,261.9	(NA)
Mortgage insurance outstanding: ⁴								
Private (bil. dol.)	7.3	40.0	105.3	148.0	192.0	223.7	230.3	* 224.2
Government (bil. dol.)	97.3	127.7	195.2	246.8	265.9	288.8	328.9	(NA)

NA Not available. ¹ Number of loans delinquent 30 days or more as percentage of mortgage loans serviced in survey. Annual average quarterly figures, seasonally adjusted. ² Percentage of loans in the foreclosure process at yearend, not seasonally adjusted. ³ Source: Mortgage Insurance Companies of America, Washington, DC, unpublished data. ⁴ Source: United States League of Savings Institutions, Washington, DC, *Savings Institutions Sourcebook*, annual. * Preliminary.

Source: Except as noted, Mortgage Bankers Association of America, Washington, DC, *National Delinquency Survey*, quarterly.

NO. 813. MORTGAGE AND CONSUMER DEBT OUTSTANDING—FAMILIES WITH DEBT, BY TENURE, AGE, AND FAMILY INCOME: 1983 AND 1986

[In percent. Covers families with heads 25 years old and over. Families include one-person units; for definition of family, see text, section 1. Consumer installment debt covers regularly scheduled payments on closed-end consumer credit and financed balances on credit cards. Based on a sample survey of 2,822 families residing in the coterminous United States, excluding those on military reservations. This survey reinterviewed respondents to the 1983 Survey of Consumer Finance. Data are subject to sampling variability, see source.]

AGE OF FAMILY HEAD AND FAMILY INCOME	PERCENT OF ALL FAMILIES—		HOMEOWNERS WITH—					OTHERS WITH—		
	Owning homes	With consumer installment debt	Total	No debt	Consumer installment debt only	Mortgage only	Mortgage and consumer installment debt	Total	No debt	Consumer installment debt
1983, total	67.2	56.9	100.0	27.5	14.5	14.0	44.0	100.0	48.4	53.6
1986, total	70.9	58.5	100.0	26.0	15.9	13.7	44.4	100.0	45.7	54.3
25-34 years old	53.0	68.9	100.0	8.2	7.0	18.9	87.9	100.0	37.9	62.1
35-44 years old	70.7	77.2	100.0	4.2	8.5	16.3	71.1	100.0	28.5	71.5
45-54 years old	80.2	70.1	100.0	11.7	20.1	14.2	54.0	100.0	46.2	53.8
55-64 years old	79.1	53.5	100.0	31.2	24.2	13.1	31.5	100.0	54.7	45.3
65 years old and over	78.7	25.4	100.0	65.3	19.8	7.7	7.2	100.0	80.8	19.2
Less than \$10,000	58.6	33.2	100.0	56.3	24.6	9.3	9.9	100.0	68.6	31.4
\$10,000-\$19,999	59.6	51.7	100.0	39.1	18.1	13.0	29.8	100.0	42.8	57.2
\$20,000-\$34,999	70.3	69.6	100.0	17.8	15.9	12.6	53.6	100.0	30.5	69.5
\$35,000-\$49,999	84.8	78.9	100.0	11.1	14.3	11.4	82.8	100.0	28.7	73.3
\$50,000 or more	91.2	85.0	100.0	12.4	7.5	21.5	58.7	100.0	46.1	53.9

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, October 1987.

NO. 814. CONSUMER CREDIT OUTSTANDING: 1970 TO 1987

[In billions of dollars, except percent. Estimated amounts of credit outstanding as of end of year. Seasonally adjusted. See also *Historical Statistics, Colonial Times to 1970*, series X 551-580]

TYPE OF CREDIT	1970	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Credit outstanding	131.6	204.9	263.8	308.3	347.5	349.4	366.6	381.1	430.4	511.8	592.4	646.1	685.5
Ratio to disposable personal income ¹ (percent)	18.3	17.9	19.1	19.8	20.0	18.2	17.2	16.9	17.7	19.1	20.8	21.3	21.5
Installment	103.9	167.0	221.5	262.0	296.5	297.6	310.7	323.5	367.9	442.5	517.8	571.8	613.0
Automobile paper	36.3	56.9	80.9	98.7	112.4	111.9	118.0	124.2	143.7	173.7	209.6	246.1	267.1
Revolving	4.9	14.5	36.8	45.2	53.3	54.8	60.8	66.2	78.6	100.2	122.0	136.3	159.3
Mobile home paper	2.4	15.3	16.3	16.9	18.2	18.6	20.3	22.8	23.7	25.7	26.8	26.8	25.9
All other loans	80.2	80.1	87.4	101.1	112.4	112.1	110.5	110.2	121.6	142.4	159.2	162.4	165.6
Commercial banks	46.6	82.9	112.1	136.5	152.7	145.5	146.0	149.1	169.3	209.1	241.6	262.2	281.6
Finance companies	27.2	32.7	38.3	45.7	57.1	61.9	69.7	74.9	82.8	88.5	111.0	133.7	140.1
Credit unions	12.8	25.4	37.3	43.9	46.1	43.6	45.6	46.8	52.9	65.5	71.9	76.1	81.1
Retailers ²	12.9	16.8	21.4	23.8	25.5	26.1	28.4	34.1	37.2	39.1	39.6	42.7	
Other ³	2.3	9.2	12.2	13.0	14.9	20.3	20.8	23.2	28.4	41.1	53.9	60.1	67.5
Noninstallment	27.7	37.9	42.3	46.3	51.0	51.8	56.0	57.6	62.5	69.2	74.7	74.2	72.5
Single-payment loans	18.9	26.8	32.1	35.1	39.1	39.6	43.8	46.5	48.8	54.6	59.1	57.2	64.2
Charge accounts	8.7	11.0	10.2	11.2	11.8	12.1	12.1	12.0	13.6	14.6	15.6	17.0	18.2

¹ Based on fourth quarter seasonally adjusted disposable personal income at annual rates as published by the U.S. Bureau of Economic Analysis in sources listed in table 695. ² Excludes 30-day charge credit held by travel and entertainment companies.

³ Comprises savings institutions and gasoline companies.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly; *Annual Statistical Digest*; and unpublished data.

NO. 815. INSTALLMENT CREDIT—FINANCE RATES ON SELECTED TYPES OF CREDIT FOR COMMERCIAL BANKS AND FINANCE COMPANIES: 1975 TO 1987

[In percent. Annual averages. Commercial bank rates are "most common" rates for direct loans with specified maturities; finance company rates are weighted averages for purchased contracts]

TYPE	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Commercial banks:												
New automobiles (48 months) ¹	11.36	10.92	11.02	12.02	14.30	16.54	16.83	13.92	13.71	12.91	11.33	10.46
Mobile homes (120 months) ¹	11.82	11.84	12.09	12.77	14.99	17.45	18.05	15.91	15.58	14.96	13.99	13.38
Other consumer goods (24 months).....	13.08	12.97	13.19	13.85	15.47	18.09	18.65	16.88	16.47	15.84	14.82	14.23
Credit-card plans.....	17.18	16.89	17.03	17.03	17.31	17.78	18.51	18.70	18.77	18.89	18.26	17.93
Finance companies:												
New automobiles.....	13.12	13.14	13.15	13.51	14.82	16.17	16.15	12.58	14.62	11.98	9.44	10.73
Used automobiles.....	17.63	17.62	17.67	17.98	19.10	20.00	20.75	18.74	17.85	17.59	15.95	14.61

¹ For 1975–1982, maturities were 36 months for new car loans and 84 months for mobile home loans.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly; *Annual Statistical Digest*; and unpublished data.

NO. 816. DELINQUENCY RATES ON BANK INSTALLMENT LOANS BY TYPE OF LOAN: 1970 TO 1987

[In percent, except as indicated. As of end of year; seasonally adjusted, except as noted. Number of loans having an installment past due for 30 days or more as a percentage of total installment loans outstanding]

TYPE OF CREDIT	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
DELINQUENCY RATES										
Closed-end Installment loans, total.....	2.14	2.77	2.82	2.61	2.39	1.94	2.08	2.32	2.26	2.47
Personal loans ¹	2.39	3.43	3.53	3.20	3.04	2.84	3.16	3.63	3.11	3.66
Automobile, direct loans.....	1.43	1.54	1.81	1.80	1.68	1.53	1.47	1.64	1.80	1.59
Automobile, indirect loans.....	1.94	1.95	2.29	2.03	1.73	1.50	1.77	2.02	2.08	2.20
Property improvement ²	1.98	1.96	1.93	1.98	1.98	2.14	2.00	1.91	1.77	1.88
Home equity and second mortgage loans ³	(NA)	(NA)	(NA)	(NA)	(NA)	1.94	1.77	2.08	1.85	2.01
Mobile home loans.....	2.59	3.82	3.14	3.37	2.69	2.44	2.68	2.39	3.04	2.57
Recreational vehicle loans.....	(NA)	2.21	1.94	2.05	1.88	1.58	1.87	1.84	1.92	1.89
Bank card loans.....	(NA)	2.33	2.72	2.53	2.38	2.08	2.81	2.95	3.15	2.33
Revolving credit loans.....	(NA)	2.16	2.70	2.86	2.16	1.44	1.50	1.98	1.53	2.33
REPOSESSIONS PER 1,000 LOANS OUTSTANDING										
Mobile home.....	3.59	2.26	1.57	1.47	1.14	1.23	1.29	1.21	2.50	1.58
Automobile, direct loans.....	1.52	.85	1.10	.99	.90	.70	.72	1.11	1.15	.86
Automobile, indirect loans.....	4.88	1.75	2.75	2.40	2.13	1.56	1.58	2.08	1.95	2.04

NA Not available. ¹ Beginning 1983, includes home appliance loans. ² Beginning 1983, own plan and FHA Title I loans.

³ Seasonally not adjusted.

Source: American Bankers Association, Washington, DC; *Consumer Credit Delinquency Bulletin*, quarterly.

No. 817. CREDIT CARDS—HOLDERS, NUMBERS, SPENDING AND DEBT: 1980 TO 1987

TYPE OF CREDIT CARD	CARDHOLDERS (mil.)			NUMBER OF CARDS (mil.)			CREDIT CARD SPENDING (bil. dol.)			CREDIT CARD DEBT (bil. dol.)		
	1980	1985	1987	1980	1985	1987	1980	1985	1987	1980	1985	1987
Total	(NA)	(NA)	1 107.2	(NA)	(NA)	2 841.4	205.4	322.7	374.8	81.2	128.0	152.5
Bank.....	63.3	73.3	78.0	110.6	161.4	204.6	52.9	125.9	165.3	25.0	65.6	91.4
Travel and entertainment.....	10.5	15.5	15.6	10.3	18.8	21.9	21.2	51.0	80.4	2.7	6.4	10.0
Retail store.....	83.0	91.0	92.8	290.5	341.0	380.8	74.4	90.0	68.8	47.3	50.5	38.4
Oil company marketers.....	68.5	78.0	59.9	109.6	117.0	118.8	28.9	28.8	24.1	2.2	2.7	3.2
Other ³	(NA)	(NA)	4 80.0	(NA)	(NA)	4 80.0	28.0	27.0	36.2	4.0	2.8	9.5

NA Not available. ¹ Cardholders may hold more than one type of card. ² Includes other types not shown separately.

³ Spending and debt data cover airline and automobile rental cards, telephone company cards and other miscellaneous credit cards.

Source: HSN Consultants Inc., Los Angeles, CA, *The Nilson Report*, monthly. (Copyright used by permission.)

Bank Accounts and Credit Cards—Checking Accounts—Bank Debits 501

No. 818. MONTHLY USE OF BANKING ACCOUNTS, CREDIT CARDS, AND CASH: 1984 AND 1986

[In percent, except as indicated. Families include one-person units; for definition of family, see text, section 1. Based on sample surveys of 1,885 families in 1984 and 668 families in 1986 residing in the United States. Data are subject to sampling variability, see source. For definition of median, see Guide to Tabular Presentation]

ITEM	1984	1986	ITEM	1984	1986
Percent of families paying with—			MONEY ORDER		
Cash, checks and credit cards ¹	67	66	Percent of families using money orders	15	14
Cash and checks ¹	20	19	Avg. size of money order ⁴	\$147	\$153
Cash and money orders	7	8	SAVINGS AND MONEY MARKET ACCOUNTS ²		
Cash only	6	7	Percent of families owning these accounts	69	59
Percent of aggregate household expenditures paid with—			Median balance ³	\$3,107	\$2,500
Checking ¹	52	48	Median number of withdrawals ⁵	1	2
Savings/money market accnts. ³	10	8	Median size of withdrawals ⁴	\$401	\$138
Credit cards	7	8	CREDIT CARDS		
Money orders	1	2	Percent of families—		
Cash	30	34	Owning credit cards	71	71
MAIN CHECKING ACCOUNTS			Using credit cards ⁷	76	82
Percent of families owning these accounts	87	85	Revolving credit card accnts. ⁸	(NA)	49
Median account balance ^{3,4}	\$580	\$650	Median number of Cards per family ⁷	4	5
Median number of checks ⁵	14	14	Transactions per family ⁸	4	5
Median size of check ^{4,8}	\$78	\$65	Median amount per transaction ^{4,9}	\$83	\$35
Charged per family ^{4,9}			Charged per family ^{4,9}	\$186	\$150

NA Not available. ¹ Checks include personal checks, bank checks, automatic payments, and electronic payments.

² Money market accounts cover money market deposit accounts and money market mutual funds. ³ For account owners.

⁴ In constant (1986) dollars. ⁵ For families using the account. Withdrawals are net of transfers, cash withdrawals, and investments. ⁶ For families using money orders. ⁷ For credit card owners. ⁸ For families who own bank or store credit cards.

⁹ For families using credit cards during the month.

No. 819. MAIN CHECKING ACCOUNT FEATURES, ELECTRONIC FUND TRANSFERS, AND AUTOMATED TELLER MACHINES (ATM): 1986

[Percent of all checking accounts, except as indicated. See headnote, table 818]

ITEM	Per cent	ITEM	Per cent
Checking accounts:		Service charge: ²	
Location of checking account—		Dependent only on account balance	30
Commercial bank	67	Dependent only on number of checks	31
Savings and loan	23	Dependent on both checks and account balance	24
Credit union or brokerage house	11	Flat or dependent on other factors	16
Overdraft protection		Overdraft protection	43
Interest and service charge payments—		Electronic fund transfers:	
Account receives interest only	27	Percent of families using—	
Service charges only	35	Direct deposit	32
Neither interest nor service charges	26	Automatic payment	28
Both interest and service charges	12	Automated teller machines:	
Balance in account kept higher to avoid fees	49	Percent of families owning ATM access card ³	46
Interest rate dependent on balance ¹	74	Percent of owners using ATM to withdraw cash	69
		Median number of ATM cash withdrawals in month ⁴	4

¹ For all accounts paying interest. ² For all accounts paying service charges. ³ For families owning at least one transaction account. ⁴ For families who used an ATM to withdraw cash during the month.

Source of tables 818 and 819: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, March 1987.

No. 820. BANK DEBITS AND DEPOSIT TURNOVER: 1975 TO 1987

[Debits in trillions of dollars; turnover as ratio of debits to deposits. Annual averages of monthly data]

ITEM	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Debits to—												
Demand deposits, all banks ¹	25.1	34.3	40.2	49.9	63.1	81.3	96.5	112.3	131.6	156.3	188.8	217.3
Major New York City banks	9.7	13.8	15.0	18.5	25.3	34.1	39.8	47.6	57.3	70.7	91.8	104.6
Other banks	15.4	20.5	25.2	31.3	37.9	47.2	56.7	64.7	74.2	85.6	97.1	112.7
ATS/NOW accounts ²	(NA)	(Z)	(Z)	.1	.2	.7	1.0	1.4	1.6	1.8	2.2	2.4
Money market deposit accounts (MMDA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	.6	.9	1.2	1.6	2.0
Savings deposits ³	(NA)	.3	.4	.6	.7	.7	.7	.7	.4	.4	.4	.5
Deposit turnover:												
All banks ¹	105	129	139	164	203	286	343	386	441	501	557	613
Major New York City banks	358	503	543	645	816	1,116	1,364	1,522	1,840	2,200	2,500	2,877
Other banks	73	86	96	113	135	186	225	249	278	306	322	357

NA Not available. ¹ Less than \$50 billion. ² Represents accounts of individuals, partnerships, and corporations, and of States and political subdivisions at insured commercial banks. ³ Accounts authorized for negotiable orders of withdrawal (NOW) and accounts authorized for automatic transfer to demand deposits (ATS). ⁴ Excludes ATS and NOW accounts, MMDA and special club accounts, such as Christmas and vacation clubs.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly, and *Annual Statistical Digest*.

No. 821. MONEY STOCK AND LIQUID ASSETS: 1970 TO 1988

[In billions of dollars. As of December. Seasonally adjusted averages of daily figures. See *Historical Statistics, Colonial Times to 1970*, series X 410-417 for similar data]

ITEM	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988, Mar.
M1, total...	215	288	386	412	439	476	522	552	620	725	751	763
Currency ¹	47	73	105	115	123	134	146	158	168	180	197	201
Travelers checks ²	1	2	4	4	4	4	5	5	6	7	7	7
Demand deposits ³	185	212	258	261	231	234	239	244	267	303	288	288
Other checkable deposits ⁴	(Z)	1	20	31	81	105	132	146	179	235	259	287
M2, total...	628	1,023	1,500	1,633	1,798	1,954	2,185	2,364	2,563	2,808	2,902	2,968
M1	215	288	386	412	439	476	522	552	620	725	751	763
Nontransaction components in M2 ⁵	414	736	1,114	1,221	1,357	1,478	1,663	1,812	1,943	2,082	2,151	2,205
Oversight repurchase (RP) agreements and Eurodollars ⁶	1	6	21	28	36	39	54	56	70	78	78	75
Money market funds, general purpose and broker/dealer ⁷	(Z)	3	33	62	151	185	138	168	177	208	222	235
Money market deposit accounts ⁸	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	379	417	514	573	525	525
Commercial banks...	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	231	267	333	380	358	361
Thrift institutions...	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	149	149	181	193	167	164
Savings deposits...	327	389	424	400	344	357	308	285	301	371	414	420
Commercial banks...	128	161	195	186	159	184	133	123	125	156	179	183
Thrift institutions...	189	228	229	214	185	193	172	163	177	215	236	237
Small time deposits ⁹	268	338	634	728	823	851	784	863	880	853	913	954
Commercial banks...	117	142	236	288	348	380	351	386	383	365	385	398
Thrift institutions...	149	198	398	442	475	471	434	497	498	489	529	556
M3, total...	877	1,172	1,807	1,991	2,237	2,443	2,693	2,978	3,196	3,490	3,662	3,745
M2...	628	1,023	1,500	1,633	1,798	1,954	2,185	2,364	2,563	2,808	2,902	2,968
Nontransaction components in M3 ¹⁰	49	149	306	358	441	489	508	615	633	683	780	777
Large time deposits ¹¹	45	130	223	280	303	327	327	417	438	439	485	491
Commercial banks ¹²	45	123	191	215	249	283	231	270	285	289	324	326
Thrift institutions...	1	6	32	45	54	64	97	147	152	150	161	185
Term RP's and term Eurodollars ¹³	4	18	74	84	104	116	143	145	142	168	196	197
Money market funds, institution only ¹⁴	(Z)	(Z)	10	15	38	51	43	63	65	84	90	97
L, total...	816	1,387	2,120	2,328	2,598	2,853	3,184	3,519	3,825	4,134	4,334	4,425
M3...	677	1,172	1,807	1,991	2,237	2,443	2,693	2,978	3,196	3,490	3,662	3,745
Savings bonds...	52	67	80	72	68	68	71	74	79	92	100	104
Short-term Treasury securities ¹¹	49	68	109	134	149	184	212	261	301	284	267	258
Bankers acceptances...	4	10	27	32	40	45	45	46	43	38	46	41
Commercial paper ¹²	35	49	98	99	105	114	133	160	207	230	259	280

Z. Less than \$500 million.

¹ Currency outside U.S. Treasury, Federal Reserve Banks and the vaults of depository institutions.

² Outstanding amount of nonbank issuers.

³ At commercial banks and foreign-related institutions.

⁴ Consists of negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts at all depository institutions, credit union share draft balances and demand deposits at thrift institutions.

⁵ This sum is seasonally adjusted as a whole.

⁶ Not seasonally adjusted.

⁷ Issued in amounts of less than \$100,000. Includes retail repurchase agreements. Excludes individual retirement accounts (IRAs) and Keogh accounts.

⁸ Issued in amounts of \$100,000 or more. Excludes those booked at international banking facilities.

⁹ Excludes those held by money market mutual funds, depository institutions and foreign banks and official institutions.

¹⁰ Excludes those held by depository institutions and money market mutual funds.

¹¹ U.S. Treasury bills and coupons with remaining maturities of less than 12 months held by other than depository institutions, Federal Reserve banks, money market mutual funds and foreign entities.

¹² Excludes commercial paper held by money market mutual funds.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly, and *Money Stock, Liquid Assets, and Debt Measures*, *Federal Reserve Statistical Release H.6*, weekly.

No. 822. FEDERAL RESERVE BANK OF NEW YORK—DISCOUNT RATES: 1976 TO 1988

[Percent per year. Rates for short-term adjustment credit. For rates applicable to other types of discount window credit, see source. See also *Historical Statistics, Colonial Times to 1970*, series X 454-455]

EFFECTIVE DATE	Rate	EFFECTIVE DATE	Rate	EFFECTIVE DATE	Rate	EFFECTIVE DATE	Rate
1976: Jan. 19...	5 1/2	1979: July 20...	10	1981: May 5...	14	1984: April 9...	9
Nov. 22...	5 1/2	Aug. 17...	10 1/2	Nov. 2...	13	Nov. 21...	8 1/2
1977: Aug. 31...	5 1/2	Sept. 19...	11	Dec. 4...	12	Dec. 24...	8
Oct. 26...	6	Oct. 8...	12	1982: July 20...	11 1/2	1985: May 20...	7 1/2
1978: Jan. 9...	6 1/2	1980: 1 Feb. 15...	13	Aug. 2...	11	1986: March 7...	6 1/2
May 11...	7	May 30...	12	Aug. 16...	10 1/2	April 21...	6 1/2
July 3...	7 1/2	June 13...	11	Aug. 27...	10	July 11...	6
Aug. 21...	7 1/2	July 28...	10	Oct. 12...	9 1/2	Aug. 12...	5 1/2
Sept. 22...	8	Sept. 26...	11	Nov. 22...	9	1987: Sept. 4...	6
Oct. 16...	8 1/2	Nov. 17...	12	Dec. 15...	8 1/2	In effect, June 30, 1988	6
Nov. 1...	9 1/2	Dec. 5...	13				

¹ See table 823, footnote 5.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly, and *Annual Statistical Digest*.

Money Market Interest and Mortgage Rates—Bond and Stock Yields 503

NO. 823. MONEY MARKET INTEREST RATES AND MORTGAGE RATES: 1970 TO 1987

[Percent per year. Annual averages of monthly data, except as indicated. See also *Historical Statistics, Colonial Times to 1970*, series X 444-453]

TYPE	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Federal funds, effective rate	7.18	5.82	7.93	11.19	13.36	16.38	12.28	9.09	10.23	8.10	6.80	6.66
Commercial paper, 3-month ^{1,2}	(NA) 6.25	7.94	10.87	12.66	15.33	11.88	8.88	10.10	7.95	6.49	6.81	
Prime rate charged by banks	7.91	7.88	9.08	12.67	15.27	18.87	14.86	10.79	12.04	9.93	8.33	8.20
Eurodollar deposits, 3-month	8.52	7.03	8.78	11.98	14.00	18.79	13.12	9.57	10.75	8.27	6.70	7.07
Finance paper, 3-month ^{2,3}	7.18	6.15	7.80	10.47	11.48	14.06	11.23	8.70	9.73	7.77	6.38	6.54
Bankers acceptances, 90-day ^{2,4}	7.31	6.29	8.08	10.98	12.72	15.32	11.88	8.90	10.14	7.92	6.39	6.74
Large negotiable certificates of deposit, 3-month, secondary market	7.56	6.44	8.22	11.22	13.07	15.91	12.27	9.07	10.37	8.05	6.52	6.86
Federal Reserve discount rate ⁵	5½-6	6-7½	6-9½	9½-12	10-13	12-14	8½-12	8½	8-9	7½-8	5½-7½	5½-6
U.S. Government securities: 3-month Treasury bill	6.39	5.78	7.19	10.07	11.43	14.03	10.61	8.61	9.52	7.48	5.98	5.77
6-month Treasury bill	6.51	6.09	7.58	10.08	11.37	13.80	11.07	8.73	9.78	7.65	6.03	6.03
1-year Treasury bill	6.48	6.28	7.74	9.75	10.89	13.14	11.07	8.80	9.92	7.81	6.08	6.32
Prime 1-year municipals ⁷	4.35	3.91	4.16	5.34	6.25	7.92	7.88	5.29	6.05	5.12	4.33	4.44
Home mortgages (HUD series ⁸): FHA insured, secondary market ⁹	9.03	9.19	8.70	10.87	13.44	16.31	15.31	13.11	13.82	12.24	9.91	10.12
Conventional, new-home ^{10,11}	8.52	9.10	9.68	11.15	13.95	16.52	15.79	13.43	13.80	12.28	10.07	10.13
Conventional, existing-home ¹⁰	8.56	9.14	9.70	11.16	13.95	16.55	15.82	13.45	13.81	12.29	10.09	10.14

NA Not available. ¹ Based on daily offering rates of dealers. ² Yields are quoted on a bank-discount basis, rather than an investment yield basis (which would give a higher figure). ³ Placed directly; averages of daily offering rates quoted by finance companies. ⁴ Based on the most representative daily offering rates of dealers. Beginning Aug. 16, 1974, closing rates were used, and from Jan. 1, 1981, rates of top-rated banks only. ⁵ Federal Reserve Bank of New York, low and high. The discount rates for 1980 and 1981 do not include the surcharge applied to frequent borrowings by large institutions. The surcharge reached 3 percent in 1980 and 4 percent in 1981. Surcharge was eliminated in Nov. 1981. ⁶ Averages based on daily closing b/d yields in secondary market, bank discount basis. ⁷ Averages based on quotations for one day each month. Source: Salomon Brothers, Inc., New York, NY, *An Analytical Record of Yields and Yield Spreads*. ⁸ HUD=Housing and Urban Development.

⁹ Averages based on quotations for 1 day each month as compiled by FHA. ¹⁰ Primary market. ¹¹ Average contract rates on new commitments.

Source: Except as noted, Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly, and *Annual Statistical Digest*.

NO. 824. BOND AND STOCK YIELDS: 1970 TO 1987

[Percent per year. Annual averages of monthly data, except as indicated. See also *Historical Statistics, Colonial Times to 1970*, series X 474-491]

TYPE	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
U.S. Treasury, constant maturities: 3-year	7.29	7.49	9.72	11.55	14.44	12.82	10.45	11.89	9.64	7.06	7.67
5-year	7.98	7.77	9.52	11.48	14.24	13.01	10.80	12.24	10.13	7.31	7.94
10-year	7.35	7.89	9.44	11.46	13.91	13.00	11.11	12.44	10.82	7.68	8.38
U.S. Govt., long-term bonds ^{2,3}	6.58	6.98	8.74	10.81	12.87	12.23	10.84	11.99	10.75	8.14	8.63
State and local govt. bonds, Aaa ⁴	8.12	6.42	5.92	7.86	10.42	10.86	8.80	9.61	8.60	6.95	7.12
State and local govt. bonds, Baa ⁴	6.75	7.82	6.73	9.02	11.76	12.46	10.17	10.38	9.58	7.75	8.17
High-graded municipal bonds (Standard & Poor's) ⁵	6.51	8.80	6.39	8.51	11.23	11.57	9.47	10.15	9.18	7.36	7.73
Municipal (Bond Buyer, 20 bonds)	6.35	7.05	6.52	8.59	11.33	11.66	9.51	10.10	9.11	7.32	7.65
Corporate Aaa seasoned	8.04	8.83	9.63	11.94	14.17	13.79	12.04	12.71	11.37	9.02	9.38
Corporate Baa seasoned	9.11	10.61	10.89	13.67	16.04	16.11	13.55	14.19	12.72	10.39	10.58
Corporate Aaa utility bonds ⁶	8.72	9.17	9.92	12.68	15.65	14.71	12.25	13.40	11.67	9.09	9.40
Corporate, by years to maturity: 5 years	8.10	7.70	9.40	12.80	13.25	13.78	9.90	10.20	10.40	7.35	6.80
10 years	8.00	8.00	9.35	12.40	13.00	13.89	10.55	11.80	11.80	8.05	7.65
20 years	7.60	8.95	9.05	12.30	13.00	14.00	11.06	12.60	12.50	8.50	8.00
30 years	7.60	8.35	9.10	12.30	13.00	14.00	11.06	12.60	12.50	8.50	8.00
Corporate (Moody's) ⁸	8.51	9.57	10.12	12.75	15.06	14.94	12.78	13.49	12.05	9.71	9.81
Industrial (37 bonds) ⁹	8.28	9.25	9.85	12.35	14.50	14.54	12.25	13.21	11.80	8.96	9.83
Railroads (13 bonds) ¹⁰	8.77	9.39	9.60	11.48	13.22	13.68	12.09	13.07	11.94	9.85	9.63
Public utilities (40 bonds)	8.68	9.88	10.39	13.15	15.62	15.33	13.31	14.03	12.29	9.46	9.98
Stocks (Standard & Poor's): ¹¹ Preferred (10 stocks)	7.22	8.36	9.11	10.80	12.36	12.53	11.02	11.58	10.49	8.76	8.37
Common: Composite (500 stocks)	3.83	4.31	5.47	5.26	5.20	5.81	4.40	4.84	4.25	3.48	3.08
Industrials (400 stocks)	3.62	3.96	5.20	4.95	4.90	5.48	4.04	4.05	3.76	3.09	2.62

¹ Yields on the more actively traded issues adjusted to constant maturities by the U.S. Treasury. ² Yields are based on closing bid prices quoted by at least five dealers. ³ Averages (to maturity or call) for all outstanding bonds neither due nor callable in less than 10 years, including several very low yielding "flower" bonds. ⁴ Source: Moody's Investors Service, New York, NY. ⁵ Source: Standard & Poor's Corp., New York, NY, *Standard & Poor's Outlook*, weekly. ⁶ Based on first trading day of each month, deferred call, new issue estimate. Source: Salomon Brothers, Inc., New York, NY, *An Analytical Record of Yields and Yield Spreads*. ⁷ Source: Scudder, Stevens & Clark, New York, NY, unpublished data. ⁸ The Aaa public utility average was suspended on Jan. 17, 1984 because of a lack of appropriate issues. The average corporate does not include Aaa utilities from Jan. 17, 1984 to Oct. 12, 1984. The Aaa public utility bonds were used during the period Jan. 17-Oct. 12, 1984. ⁹ Covers 40 bonds for period 1970-1983 and 38 bonds for 1984-1986. ¹⁰ Covers 23 bonds for period 1970-1981, 15 bonds for 1982, and 17 bonds for 1983. ¹¹ Yields based on 10 stocks, 4 yields. Issues converted to a price equivalent to \$100 per a and a 7 percent annual dividend before averaging.

Source: Except as noted, Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly.

**NO. 825. SELECTED TIME DEPOSITS AND OTHER ACCOUNTS AT INSURED COMMERCIAL BANKS—
DEPOSITS AND INTEREST RATES: 1984 TO 1988**

[Estimates based on data collected from a sample of about 500 banks]

TYPE OF DEPOSIT	AMOUNT OUTSTANDING (mil. dol.)					AVERAGE RATE PAID (percent)				
	1984, Dec.	1985, Dec.	1986, Dec.	1987, Dec.	1988, Mar.	1984, Dec.	1985, Dec.	1986, Dec.	1987, Dec.	1988, Mar.
"Super NOW" accounts ¹	34,686	44,545	164,247	174,752	176,212	7.01	5.99	5.00	4.95	4.89
Money market deposit accounts ²	271,180	330,077	379,996	363,807	357,647	8.10	6.71	5.19	5.43	5.34
Money market certificates: ³										
7-31 day.....	5,354	5,318	6,101	7,145	6,249	8.01	6.85	5.45	6.02	5.82
32-91 day.....	17,953	20,968	21,601	23,306	21,951	8.07	7.16	5.62	6.28	6.03
92-182 day.....	165,349	147,777	131,483	132,440	129,932	8.77	7.50	5.70	6.75	6.50
183 day-1 year.....	59,429	66,131	72,227	86,799	103,723	9.11	7.77	5.83	7.14	6.88
1-2½ year.....	69,875	81,172	83,761	89,619	95,626	9.73	8.24	6.22	7.46	7.19
2½ year or more.....	107,119	115,355	120,699	121,325	123,323	10.18	8.73	6.61	7.86	7.57
All IRA and Keogh Plan deposits.....	44,033	59,352	73,127	83,241	86,039	(NA)	(NA)	(NA)	(NA)	(NA)
Retail repurchase agreements ⁴	1,228	1,294	1,062	767	989	7.49	6.77	5.37	5.46	5.47

NA Not available. ¹Negotiable order of withdrawal accounts containing an agreement between depositor and depository such that some or all funds deposited are eligible to earn more than 5.25 percent. As of January 1, 1986 interest rate ceilings were removed from all NOW accounts. Beginning with the December 1986 data the "Super NOW" accounts category includes all NOW accounts, including those accounts which were subject to a 5.25 percent regulatory interest rate restriction prior to January 1, 1986. Estimates for NOW accounts beginning in December 1986 are based on reports of deposits. ²Deposits with no minimum balance requirement and no required minimum maturity but institutions must reserve the right to require at least seven days' notice prior to withdrawal, no restrictions on depositor eligibility, or limitations on the amount of interest that may be paid; such accounts may allow up to six transfers per month, no more than three of which may be draft and may permit unlimited withdrawals by mail, messenger, or in person. Estimates based on reports of deposits. ³All interest-bearing time certificates and open account time deposits with balances of less than \$100,000, including those held in IRAs and Keogh Plan deposits.

⁴Retail repurchase agreements are in denominations of less than \$100,000 with maturities of less than 90 days that arise from the transfer of direct obligations of, or obligations fully-guaranteed as to principal and interest by, the U.S. Government or an agency thereof.

Source: Board of Governors of the Federal Reserve System, *Money Stock, Liquid Assets, and Debt Measures, Federal Reserve Statistical Release H.6*, weekly.

NO. 826. SECURITY PRICES: 1970 TO 1987

[Annual averages of monthly figures, except as noted. See also *Historical Statistics, Colonial Times to 1970*, series X 492-498]

CLASS OR ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Bond prices (dollars per \$100 bond):										
Standard & Poor's: Municipal ^{1,2} ..	72.3	68.9	57.4	43.2	41.8	51.4	48.0	53.0	65.1	62.7
Dow Jones and Co., Inc.: ³										
Yearly high.....	89.7	89.7	76.6	65.8	71.5	77.8	72.9	83.7	93.7	95.5
Yearly low.....	64.4	66.2	61.0	55.0	55.7	69.4	64.8	72.3	83.7	81.3
Stock prices:										
Standard & Poor's common index (500 stocks) (1941-43=10).....	83.2	86.2	118.7	128.0	119.7	160.4	180.5	186.8	236.3	268.8
Industrial.....	91.3	96.6	134.5	144.2	133.6	180.5	181.3	207.8	262.2	330.5
N.Y. Stock Exchange common stock index (Dec. 31, 1965=50):										
Composite.....	45.7	45.7	68.1	74.0	68.9	92.6	92.5	108.1	136.0	161.7
Yearly high ⁴	52.4	51.2	81.0	79.1	82.4	99.6	98.1	121.9	145.8	189.0
Yearly low ⁵	37.7	37.1	55.3	65.0	58.8	79.8	85.1	94.6	117.8	125.9
Industrial.....	48.0	50.5	76.6	85.4	78.2	107.5	108.0	123.8	155.9	195.3
Transportation.....	32.1	31.1	60.5	72.6	60.4	89.4	85.6	104.1	119.9	140.4
Utility.....	37.2	31.5	37.3	38.9	39.8	47.0	46.4	56.8	71.4	74.3
Finance.....	54.6	47.1	64.3	73.5	72.0	95.3	89.3	114.2	147.2	146.5
American Stock Exchange Market Value Index (Aug. 31, 1973=50).....	48.3	41.6	150.6	171.8	141.3	216.5	208.0	229.1	264.4	316.4
NASDAQ OTC composite ⁶	(NA)	77.6	202.3	195.9	232.4	278.6	247.4	324.9	348.8	402.9
Industrial.....	(NA)	81.0	261.4	229.3	273.8	323.7	260.7	330.2	349.3	422.9
Insurance.....	(NA)	80.9	166.8	194.3	226.4	257.6	283.1	382.1	404.1	425.5
Banks.....	(NA)	72.4	118.4	143.1	158.4	203.8	229.8	349.4	412.5	465.1
Dow Jones and Co., Inc., total (65 stocks) ¹⁷	243.9	247.3	328.2	384.6	345.4	472.2	463.1	541.6	702.5	849.5
Industrial (30 stocks).....	753.2	802.8	891.4	929.2	884.8	1,190.3	1,178.5	1,328.2	1,792.8	2,278.0
Transportation (20 stocks).....	152.4	163.4	307.2	398.6	359.6	544.6	513.8	645.7	785.4	929.2
Public utility (15 stocks).....	106.8	79.8	110.4	106.6	112.0	130.0	131.8	157.6	195.2	201.7
Wileshire 5000 equity index ⁸ (Dec. 31, 1980=1404.596).....	* 830.3	763.8	1,220.7	1,343.7	1,233.7	1,891.5	1,644.6	1,923.8	2,418.8	2,843.7
Standard & Poor's:										
Dividend-price ratio (percent)....	3.83	4.31	5.26	5.20	5.81	4.40	4.64	4.25	3.48	3.08
Earnings-price ratio (percent)....	6.45	9.14	12.68	11.87	11.60	8.02	10.02	8.12	6.09	5.48

NA Not available. ¹Source: U.S. Bureau of Economic Analysis. ²Derived from average yields on basis of assumed 4 percent, 20-year bond; Wednesday closing prices. ³Source: Dow Jones and Co., Inc., New York, NY. Effective June 30, 1976, the Dow Jones averages of 20 income railroad bonds were discontinued. With the dropping of the rail averages, which had been part of the Dow-Jones 40-bond average, the 40-bond average became a 20-bond average consisting of 10 utility bonds and 10 industrial bonds. ⁴Effective July 1976, the index includes 400 industrial stocks (formerly 425), 20 transportation (formerly 15 rail), 40 public utility (formerly 60), and 40 financial stocks, not previously covered. ⁵Source: New York Stock Exchange, Inc., New York, NY, *Fact Book*, annual. ⁶Source: National Association of Securities Dealers, Washington, DC, *Fact Book*, annual. OTC=over-the-counter. ⁷Based on stocks listed on the New York Stock Exchange. ⁸Represents return on the market value of all common equity securities for which daily pricing is available. For 1970-1975, annual average of end of month figures; thereafter, annual average of daily figures. Source: Wileshire Associates, Santa Monica, CA, releases. *Represents Dec. 31, 1970.

Source: Except as noted, Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly.

U.S. Securities Transactions—Foreign Stocks and Bonds Transactions 505

No. 827. FOREIGN PURCHASES AND SALES OF U.S. SECURITIES, BY TYPE OF SECURITY, 1980 TO 1987, AND BY SELECTED COUNTRY, 1986 AND 1987

[In billions of dollars.] Covers transactions in all types of long-term domestic and foreign securities by foreigners as reported by banks, brokers, and other entities in the United States (except non-marketable U.S. Treasury notes, foreign series; and nonmarketable U.S. Treasury bonds and notes, foreign currency series). Data cover new issues of securities, transactions in outstanding issues, and redemptions of securities. Includes transactions executed in the U.S. for the account of foreigners, and transactions executed abroad for the account of reporting institutions and their domestic customers. Data by country show the country of domicile of the foreign buyers and sellers of the securities; in the case of outstanding issues, this may differ from the country of the original issuer. The term "foreigner" covers all institutions and individuals domiciled outside the U.S., including U.S. citizens domiciled abroad, and the foreign branches, subsidiaries and other affiliates abroad of U.S. banks and businesses; the central governments, central banks, and other official institutions of foreign countries; and international and regional organizations. "Foreigner" also includes persons in the U.S. to the extent that they are known by reporting institutions to be acting on behalf of foreigners. Minus sign (−) indicates net sales by foreigners or a net outflow of capital from the U.S.]

YEAR AND COUNTRY	NET PURCHASES				TOTAL TRANSACTIONS ⁴					
	Total	Treasury bonds and notes ¹	U.S. Govt. corporations ² bonds	Corporate bonds ³	Corporate stocks	Total	Treasury bonds and notes ¹	U.S. Govt. corporations ² bonds	Corporate bonds ³	Corporate stocks
1980	15.8	4.9	2.6	2.9	5.4	196.0	97.4	16.9	8.5	75.2
1982	11.7	5.4	(−2)	1.9	5.4	435.2	253.9	28.1	19.0	134.1
1984	31.4	21.5	1.2	11.7	−3.0	639.5	451.2	32.5	33.2	122.6
1985	78.2	29.2	4.3	39.8	4.8	1,256.1	988.0	45.6	83.5	159.0
1986, total ⁵	68.8	19.4	7.0	43.7	18.7	2,622.5	2,149.3	87.2	128.5	277.5
United Kingdom	43.3	4.5	1.0	32.9	4.8	597.1	443.7	15.2	73.6	64.6
Japan	12.9	(−2)	4.5	5.1	3.3	719.1	659.3	20.2	12.8	26.9
Canada	2.2	.9	.3	.2	.8	114.7	75.6	1.0	3.5	34.6
West Germany	7.8	7.7	.1	−3	.3	79.2	59.2	1.5	8.5	10.0
Switzerland	6.4	.3	.1	4.5	1.6	93.6	46.6	.4	9.6	37.0
France	−1	−.7	.1	.3	.5	32.4	19.4	1.5	1.8	9.6
1987, total ⁵	69.7	25.8	5.0	22.7	16.2	3,314.8	2,648.9	80.6	103.3	481.9
United Kingdom	24.4	4.0	1.5	18.4	.5	781.4	604.5	17.5	55.6	103.8
Japan	13.8	.9	1.1	.5	11.4	1,196.7	1,051.0	30.8	12.4	102.6
Canada	5.9	4.5	.3	1.0	1.0	182.3	127.8	1.5	3.1	49.9
West Germany	13.2	13.3	.2	−2	−.1	112.2	89.7	1.4	4.8	16.2
Switzerland	2.4	1.9	(−2)	1.7	−1.2	94.9	28.4	.6	6.3	59.5
France	1.4	.3	(−2)	.2	.9	42.7	19.8	.6	2.2	20.1

² Less than \$50 million. ¹ Marketable bonds and notes. ² Includes federally sponsored agencies. ³ Includes transactions in directly placed issues abroad by U.S. corporations and issues of States and municipalities. ⁴ Total purchases plus total sales. ⁵ Includes other countries, not shown separately.

No. 828. UNITED STATES PURCHASES AND SALES OF FOREIGN STOCKS AND BONDS, 1980 TO 1987, AND BY SELECTED COUNTRY, 1986 AND 1987

[In billions of dollars.] See headnote, table 827. Minus sign (−) indicates net sales by U.S. investors or a net inflow of capital into the United States]

YEAR AND COUNTRY	NET PURCHASES			TOTAL TRANSACTIONS ¹			PURCHASES		SALES	
	Total	Bonds	Stocks	Total	Bonds	Stocks	Bonds	Stocks	Bonds	Stocks
1980	3.1	1.0	2.1	53.1	35.2	17.9	18.1	10.0	17.1	7.9
1982	7.0	3.2	3.8	106.2	75.9	30.3	39.6	17.0	36.3	13.3
1984	5.0	3.9	1.1	146.7	116.0	30.7	59.9	15.9	56.0	14.8
1985	7.9	4.0	3.9	212.1	166.4	45.7	85.2	24.8	81.2	20.9
1986, total ²	5.5	3.7	1.9	437.8	337.7	100.2	170.7	51.0	167.0	49.1
United Kingdom	15.0	13.7	1.3	184.3	151.8	32.6	82.7	17.0	69.0	15.6
Japan	−7.5	−6.1	−1.4	110.6	85.0	25.6	39.5	12.1	45.5	13.5
Canada	.9	.2	1.1	26.4	18.5	9.8	8.2	5.5	8.4	4.4
West Germany	1.7	1.2	.5	19.0	12.9	6.1	7.1	3.3	5.8	2.8
Switzerland	1.3	1.0	.3	8.1	4.8	3.2	2.9	1.8	1.9	1.5
France	−	−.5	.9	4.8	4.2	2.2	2.2	2.3	2.6	1.8
1987, total ²	6.5	7.6	−1.1	595.1	405.8	189.3	206.7	94.1	199.1	85.2
United Kingdom	12.4	9.2	3.2	231.8	164.0	67.8	86.6	35.5	77.4	32.3
Japan	−5.6	.9	−6.5	143.2	95.5	47.7	48.2	20.6	47.3	27.1
Canada	4.1	1.7	2.3	40.7	21.9	18.8	11.8	10.6	10.1	8.3
West Germany	−1.7	−1.3	−.4	43.0	34.3	8.6	16.5	4.1	17.8	4.5
Switzerland	1.0	.3	.7	12.4	8.1	6.3	3.2	3.5	2.9	2.8
France	1.1	1.3	−.2	18.0	11.9	6.1	6.6	3.0	5.3	3.2

¹ Represents or rounds to zero. ² Total purchases plus total sales. ³ Includes other countries, not shown separately.

Source of tables 827 and 828: U.S. Dept. of Treasury, *Treasury Bulletin*, quarterly.

No. 829. SALES OF STOCKS AND OPTIONS ON REGISTERED EXCHANGES: 1970 TO 1987

[Excludes over-the-counter trading. See also *Historical Statistics, Colonial Times to 1970*, series X 517-530]

EXCHANGE	Unit	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Market value of all sales, all exchanges ^{1,2}	Bil. dol.	136	173	522	532	657	1,023	1,004	1,260	1,868	2,492
New York	Bil. dol.	108	143	398	416	515	816	815	1,024	1,453	1,987
American	Bil. dol.	15	6	47	40	34	48	32	38	63	102
Midwest	Bil. dol.	5	7	21	25	35	60	62	79	102	122
Chicago	Bil. dol.	-	6	28	22	32	39	35	38	56	124
Pacific	Bil. dol.	5	5	13	13	21	31	31	40	55	71
Philadelphia	Bil. dol.	3	3	11	11	14	20	19	23	35	48
STOCKS ³											
Shares sold, all exchanges ²	Million	4,539	6,226	15,488	15,910	22,414	30,146	30,456	37,046	48,338	63,771
New York	Million	3,213	5,056	12,390	12,843	18,211	24,253	25,150	30,222	39,258	53,038
American	Million	879	541	1,659	1,472	1,550	2,209	1,584	2,115	2,999	3,496
Midwest	Million	149	252	598	735	1,144	1,682	1,843	2,274	2,784	3,329
Pacific	Million	165	193	435	457	810	1,070	1,006	1,352	1,750	2,034
Market value, all exchanges ²	Bil. dol.	131	157	476	491	603	957	951	1,200	1,705	2,284
New York	Bil. dol.	103	134	398	416	514	815	814	1,023	1,450	1,983
American	Bil. dol.	14	6	35	26	20	31	21	26	43	53
Midwest	Bil. dol.	5	7	21	25	35	60	62	79	102	122
Pacific	Bil. dol.	5	5	11	11	18	27	28	37	51	57
OPTIONS ⁴											
Contracts traded, all exchanges ²	Million	(NA)	18	97	109	137	149	197	233	289	305
Chicago	Million	(NA)	14	53	58	76	82	123	149	180	182
American	Million	(NA)	4	29	35	39	39	40	49	65	71
Market value of contracts traded, all exchanges ²	Bil. dol.	(NA)	6.4	45.8	41.7	53.7	64.2	53.0	59.1	87.9	118.9
Chicago	Bil. dol.	(NA)	6.3	27.9	22.4	32.3	39.4	34.9	38.4	55.9	76.9
American	Bil. dol.	(NA)	12.5	13.8	14.3	15.8	10.5	11.6	19.0	25.7	
Options exercised:											
Number of contracts	Million	(NA)	.3	4.9	7.4	9.2	13.6	11.9	10.5	14.5	17.0
Value	Bil. dol.	(NA)	1.3	20.4	34.6	37.1	55.1	55.6	49.2	72.8	85.9

- Represents zero. NA Not available. ¹ Includes market value of rights and warrants and, through 1975, bond sales. Excludes the value of options exercised. ² Includes other registered exchanges, not shown separately. ³ Includes voting trust certificates, American Depository Receipts, and certificate of deposit for stocks. ⁴ Includes non-equity options as of October 1982.

Source: U.S. Securities and Exchange Commission, *SEC Monthly Statistical Review*.

No. 830. VOLUME OF TRADING ON NEW YORK STOCK EXCHANGE: 1970 TO 1987

[Round lot: A unit of trading or a multiple thereof. On the NYSE the unit of trading is generally 100 shares in stocks. For some inactive stocks, the unit of trading is 10 shares. Odd lot: An amount of stock less than the established 100-share unit or 10-share unit of trading]

ITEM	Unit	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
Shares traded	Million	3,124	4,839	8,336	11,662	12,049	16,669	21,846	23,309	27,774	36,009	48,143
Round lots	Million	2,937	4,693	8,156	11,352	11,854	16,458	21,590	23,071	27,511	35,680	47,801
Average daily shares	Million	11.6	18.6	32.2	44.9	46.9	65.1	85.3	91.2	109.2	141.0	189.0
High day	Million	21.3	35.2	81.6	84.3	92.9	149.4	129.4	236.6	181.0	244.3	608.1
Low day	Million	6.7	8.7	18.3	16.1	23.9	36.8	53.0	46.4	62.1	48.9	86.7
By size:												
At 100-900 shares	Percent	(NA)	42.1	27.5	24.7	21.1	16.2	14.6	11.3	10.6	10.8	13.6
At 1,000-4,900 shares	Percent	(NA)	31.4	33.7	32.2	31.0	28.5	26.7	25.1	24.1	25.7	21.1
At 5,000-9,900 shares	Percent	(NA)	8.7	11.4	11.4	12.1	12.8	12.7	13.8	13.8	13.9	14.1
At 10,000 or more shares ²	Percent	(NA)	17.9	27.4	31.7	35.8	42.5	46.0	49.8	51.5	49.6	51.2
Odd lots	Million	186	146	180	209	196	211	256	238	283	329	342
Value of shares traded	Bil. dol.	102.5	131.7	244.5	382.4	396.1	495.1	775.3	773.4	980.8	1,388.8	1,888.7
Round lots	Bil. dol.	95.3	126.7	238.2	374.9	389.2	488.4	765.3	764.7	970.5	1,374.3	1,873.6
Odd lots	Bil. dol.	7.2	5.0	6.3	7.5	6.9	6.7	10.1	8.7	10.3	14.5	15.1
Bond volume ³	Mil. dol.	4,495	5,178	4,088	5,190	5,733	7,155	7,572	6,982	9,046	10,464	9,727
Daily average	Mil. dol.	17.7	20.5	16.2	20.5	22.7	28.3	29.9	27.6	35.9	41.4	38.4

NA Not available. ¹ Share volume of reported trades by size (percent of total) on New York Stock Exchange.² Includes bunched orders at the opening and re-opening of trading. ³ Par value.Source: New York Stock Exchange, Inc., New York, NY, *Fact Book*, annual.

No. 831. NASDAQ—SECURITIES LISTED AND VOLUME OF TRADING: 1975 TO 1987

ITEM	Unit	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
Companies listed	Number	2,467	2,543	2,894	3,353	3,264	3,901	4,097	4,136	4,417	4,706
Issues	Number	2,579	2,670	3,050	3,687	3,664	4,467	4,723	4,784	5,189	5,537
Shares traded	Million	1,390	3,651	6,682	7,823	8,432	15,909	15,159	20,699	28,737	37,890
Average daily volume	Million	5.5	14.4	26.5	30.9	33.3	62.8	59.9	82.1	113.6	149.8
Value of shares traded	Bil. dol.	21.2	44.3	68.7	71.1	84.2	188.3	153.5	233.6	378.2	499.9

Source: National Association of Securities Dealers, Washington, DC, *Fact Book*, annual.

No. 832. SECURITIES LISTED ON N.Y. STOCK EXCHANGE: 1970 TO 1987

[As of December 31, except cash dividends are for calendar year]

ITEM	Unit	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
Bonds:												
Number of issuers	Number..	843	1,066	1,043	1,045	1,049	1,031	1,034	1,024	1,010	951	885
Number of issues	Number..	1,729	2,632	2,939	3,057	3,110	3,233	3,600	3,751	3,856	3,611	3,346
Face value	Bil. dol..	135	334	526	602	581	793	965	1,084	1,327	1,380	1,651
Market value	Bil. dol..	113	315	460	508	574	766	888	1,022	1,339	1,458	1,621
Average price	Percent	83.60	91.89	87.36	84.41	84.24	96.67	93.04	94.29	100.90	105.66	99.20
Stocks:												
Companies	Number..	1,351	1,557	1,585	1,570	1,565	1,526	1,550	1,543	1,541	1,575	1,647
Number of issues	Number..	1,840	2,111	2,192	2,228	2,220	2,225	2,307	2,319	2,298	2,257	2,244
Shares listed	Billion ..	16.1	22.5	30.0	33.7	38.3	39.5	45.1	49.1	52.4	59.6	72.0
Market value	Bil. dol..	636	685	961	1,243	1,144	1,305	1,584	1,585	1,950	2,199	2,216
Average price	Dollars	39.61	30.48	31.99	36.87	29.87	33.03	35.11	32.31	37.20	36.89	30.87
Cash dividends on common stock	Bil. dol..	19.8	26.9	46.9	53.1	60.6	62.2	67.1	68.2	74.2	76.2	84.4

No. 833. STOCK OWNERSHIP—CHARACTERISTICS OF SHAREOWNERS: 1970 TO 1985

[In thousands. Represents all publicly owned issues of common and preferred stocks including stock mutual funds. Based on national probability samples; see source for detailed explanation]

CHARACTERISTIC	1970	1975	1980	1983	1985	CHARACTERISTIC	1970	1975	1980	1983	1985
Total	30,850	25,270	30,200	42,360	47,040	Education:					
Male	15,689	12,698	15,666	20,864	23,699	High school: ²	3,566	1,621	1,746	2,356	2,513
Female	15,161	12,508	14,534	21,496	23,341	3 years or less	8,697	6,580	5,737	8,788	7,869
Under 21 years	2,221	1,818	2,308	2,749	2,280	4 years.....					
21-34 years	4,500	2,838	6,407	10,552	11,093	College: ²	5,867	5,301	9,353	13,529	13,937
35-44 years	5,801	3,976	5,925	8,346	10,982	1-3 years	9,999	9,886	10,613	14,375	19,854
45-54 years	7,556	5,675	5,456	6,586	7,899	4 years or more	2,221	1,818	2,308	2,749	2,260
55-64 years	6,084	5,099	5,144	6,850	8,217	Minors ³					
65 years and over	4,330	5,800	4,589	7,277	6,589						

¹ Includes small number of shareowners not distributed by breakdown. ² Persons 21 years old and over. ³ Shareowners whose stockholdings are registered in accordance with the Gifts to Minors Statutes.

Source of tables 832 and 833: New York Stock Exchange, Inc., New York, NY, *Shareownership*, periodic, and *Fact Book*, annual.

No. 834. MUTUAL FUNDS—SUMMARY: 1970 TO 1987

[See also *Historical Statistics, Colonial Times to 1970*, series X 536-539]

TYPE OF FUND	Unit	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Number of funds, total	Number..	361	426	564	665	857	1,026	1,246	1,531	1,843	2,324
Money market funds	Number ..	(X)	36	96	159	281	307	329	348	360	389
Equity funds	Number ..	294	286	267	286	320	374	466	574	700	847
Income and bond funds	Number ..	67	104	149	154	169	201	240	323	409	566
Municipal bond funds	Number ..	(X)	42	46	50	78	78	114	174	247	368
Short-term municipal bond funds ¹	Number ..	(X)	10	20	37	66	97	112	127	154	
Shareholder accounts, total	Millions ..	(NA)	9.9	12.1	17.5	21.4	24.6	28.2	35.0	46.1	54.7
Equity, bond, and income funds	Millions ..	(NA)	9.7	7.3	7.2	8.2	12.1	14.4	20.0	29.8	37.0
Money market funds and short-term municipal bond funds ¹	Millions ...	(NA)	.2	4.8	10.3	13.2	12.5	13.8	15.0	16.3	17.7
Assets, total	Bil. dol..	47.6	45.8	134.7	241.4	296.6	292.9	370.9	495.5	716.3	769.9
Money market funds	Bil. dol..	(X)	3.6	74.4	181.9	206.6	162.5	209.7	207.5	228.3	254.7
Equity funds	Bil. dol..	45.1	37.5	44.4	41.2	53.6	77.0	83.1	116.9	161.5	180.6
Income and bond funds	Bil. dol..	2.5	.7	11.1	11.0	15.8	22.0	33.3	95.4	187.0	198.2
Municipal bond funds	Bil. dol..	(X)	2.9	3.1	7.4	14.6	20.8	39.4	75.7	77.0	
Short-term municipal bond funds ¹	Bil. dol..	(X)	1.9	4.2	13.2	16.8	23.8	36.3	63.8	61.4	
Sales, total	Bil. dol..	4.6	10.1	247.5	472.2	627.0	547.8	680.1	953.8	1,205.7	1,251.6
Money market funds	Bil. dol..	(X)	6.8	232.2	451.9	581.8	463.0	572.0	730.1	792.3	869.1
Equity funds	Bil. dol..	4.2	2.6	5.8	6.0	8.3	22.4	20.3	30.1	57.7	72.1
Income and bond funds	Bil. dol..	.4	.7	2.6	2.3	4.0	8.8	15.7	64.8	118.3	89.7
Municipal bond funds	Bil. dol..	(X)	1.8	1.5	3.5	9.1	9.8	19.4	39.8	28.9	
Short-term municipal bond funds ¹	Bil. dol..	(X)	5.3	10.5	29.4	44.5	62.3	109.4	197.5	191.8	
Redemptions, total	Bil. dol..	3.0	9.6	216.5	362.6	588.4	565.8	607.0	884.9	1,015.6	1,178.8
Money market funds	Bil. dol..	(X)	5.9	204.5	346.7	559.6	508.7	531.0	732.3	776.3	865.7
Equity funds	Bil. dol..	2.8	3.3	5.7	5.1	5.2	9.3	10.9	18.2	27.2	40.2
Income and bond funds	Bil. dol..	.2	.4	1.5	1.6	1.7	3.1	5.1	11.1	30.7	58.6
Municipal bond funds	Bil. dol..	(X)	1.0	.8	.7	2.3	4.1	4.3	9.1	17.4	
Short-term municipal bond funds ¹	Bil. dol....	(X)	3.8	8.3	21.2	42.4	55.9	98.8	172.3	196.9	

NA Not available. X Not applicable. ¹The average maturity of the portfolio is generally less than two years.Source: Investment Company Institute, Washington, DC, *Mutual Fund Fact Book*, annual. (Copyright.)

No. 835. COMMODITY FUTURES TRADING ON U.S. EXCHANGES—VOLUME OF TRADING: 1970 TO 1987

[In thousands. 1970 for year ending June 30; thereafter, for years ending Sept. 30]

COMMODITY	1970	1980	1981	1982	1983	1984	1985	1986	1987
Number of contracts traded.....	12,398	82,691	101,124	107,644	136,077	148,822	152,590	183,098	213,547
Grain.....	2,162	18,287	19,808	14,885	17,794	15,889	10,726	10,915	10,945
Oilseeds/products.....	3,677	15,692	20,315	15,763	19,823	23,489	14,883	13,799	14,152
Livestock/products.....	3,432	11,808	9,804	10,968	11,083	8,429	7,926	8,571	8,755
Other agricultural.....	2,017	7,787	4,578	4,885	6,324	5,958	5,141	6,700	5,719
Energy products.....	-	1,087	3,261	2,301	3,204	4,946	7,025	11,531	20,308
Metals.....	1,110	14,099	17,870	19,307	26,316	22,447	18,383	16,234	19,426
Financial instruments.....	-	10,213	20,091	31,251	40,155	51,003	72,127	96,887	114,337
Currencies.....	-	3,719	5,399	8,284	11,398	16,661	16,377	19,061	19,907

- Represents zero.

Source: U.S. Commodity Futures Trading Commission, *Annual Report*.

NO. 836. U.S. LIFE INSURANCE COMPANIES—SUMMARY: 1970 TO 1987

[As of December 31 or calendar year, as applicable. Covers domestic and foreign business of U.S. companies. See also *Historical Statistics, Colonial Times to 1970*, series X 879 and X 890-917]

ITEM	Unit	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
U.S. companies.....	Number...	1,780	1,746	1,958	1,991	2,060	2,117	2,193	2,261	2,254	2,265
Sales ¹	Bil. dol....	207	317	655	1,139	920	1,279	1,390	1,530	1,578	1,856
Ordinary.....	Bil. dol....	135	207	482	700	681	971	1,074	1,187	1,178	1,287
Group ¹	Bil. dol....	65	103	190	436	257	306	315	342	400	388
Industrial.....	Bil. dol....	7	7	4	3	2	2	1	1	(z)	(z)
Income.....	Bil. dol....	49.1	78.0	130.9	151.9	170.0	176.0	206.1	234.0	282.3	314.3
Life insurance premiums.....	Bil. dol....	21.7	29.3	40.8	46.3	50.8	50.3	51.3	60.1	66.2	76.7
Percent of total.....	Percent	44.2	37.6	31.2	30.5	29.9	28.6	24.9	25.7	23.5	24.4
Annuity considerations.....	Bil. dol....	3.7	10.2	22.4	27.6	34.6	30.5	42.8	53.9	63.7	88.7
Health insurance premiums.....	Bil. dol....	11.4	19.1	29.4	31.8	35.0	38.2	40.7	41.8	44.2	47.8
Investment and other.....	Bil. dol....	12.3	19.4	38.3	46.2	49.6	57.0	71.3	78.2	88.2	101.3
Disbursements.....	Bil. dol....	39.0	58.2	88.2	101.8	113.3	123.5	138.5	151.8	186.5	202.3
Payments to policyholders ²	Bil. dol....	25.6	38.1	59.0	65.1	71.2	80.9	88.9	95.7	131.4	144.4
Percent of total.....	Percent	65.6	65.5	66.9	63.9	62.8	65.5	64.8	63.0	70.5	71.4
Death payments.....	Bil. dol....	7.2	9.3	12.9	13.6	14.5	16.8	17.6	18.5	19.6	20.7
Matured endowments.....	Bil. dol....	1.0	1.0	.8	.7	.6	.6	.7	.8	.8	.8
Annuity payments.....	Bil. dol....	1.7	3.2	7.4	9.6	10.3	12.7	18.0	19.7	17.8	20.3
Policy dividends.....	Bil. dol....	3.8	5.1	8.1	9.3	9.6	10.8	11.4	12.4	12.4	13.0
Surrender values ³	Bil. dol....	2.9	3.8	6.4	7.1	9.8	12.5	14.5	15.9	19.6	53.7
Disability benefits.....	Bil. dol....	2	4	5	6	5	5	4	5	5	.5
Commissions, expenses, etc. ³	Bil. dol....	12.9	19.4	27.8	35.1	40.3	40.7	46.0	53.1	51.4	54.7
Dividends to stockholders.....	Bil. dol....	.5	.7	1.4	1.6	1.8	1.9	2.7	3.0	3.7	3.2
BALANCE SHEET											
Assets.....	Bil. dol....	207.3	289.3	479.2	525.8	588.2	654.9	723.0	825.9	937.6	1,044.5
Government securities.....	Bil. dol....	11.1	15.2	33.0	39.5	55.5	76.6	99.8	124.6	144.6	151.4
Corporate securities.....	Bil. dol....	88.5	133.9	227.0	241.5	268.5	297.0	322.5	374.3	432.9	502.2
Percent of total assets.....	Percent	42.7	46.3	47.4	45.9	45.7	45.3	44.6	45.3	46.2	48.1
Bonds.....	Bil. dol....	73.1	105.8	179.6	193.8	212.6	232.1	259.1	296.8	342.0	405.7
Stocks.....	Bil. dol....	15.4	28.1	47.4	47.7	55.7	64.9	63.4	77.5	90.9	96.5
Mortgages.....	Bil. dol....	74.4	89.2	131.1	137.7	142.0	151.0	156.7	171.8	193.8	213.5
Real estate.....	Bil. dol....	6.3	9.6	15.0	18.3	20.6	22.2	25.7	28.8	31.6	34.2
Policy loans.....	Bil. dol....	16.1	24.5	41.4	48.7	53.0	54.1	54.5	54.4	54.1	53.6
Other.....	Bil. dol....	10.9	16.9	31.7	40.1	48.6	54.0	63.8	72.0	80.6	88.6
Interest earned on assets ⁴	Percent	5.30	6.36	8.02	8.57	8.91	8.95	9.45	9.63	9.85	9.09
Liabilities ²	Bil. dol....	189.9	268.7	444.8	488.4	546.7	608.5	672.6	769.1	873.4	977.1
Policy reserves ²	Bil. dol....	167.8	237.1	390.4	428.0	478.4	532.4	584.2	665.3	761.9	882.1
Annuites.....	Bil. dol....	46.8	80.8	181.5	209.1	252.4	295.5	341.7	410.6	488.6	561.7
Group.....	Bil. dol....	34.0	59.9	140.4	181.0	191.9	221.7	254.6	303.0	355.8	392.5
Individual ⁵	Bil. dol....	14.9	20.9	41.0	48.1	60.5	74.8	87.1	107.6	132.8	169.2
Life insurance.....	Bil. dol....	115.4	150.1	197.9	207.0	213.8	221.0	225.9	235.9	252.0	276.4
Health insurance.....	Bil. dol....	3.5	6.3	11.0	11.9	13.2	15.0	16.6	18.8	21.3	24.0
Capital and surplus ⁴	Bil. dol....	17.3	20.6	34.4	37.4	41.5	46.4	50.4	56.8	64.1	67.4

Z. Less than \$500 million. ¹Includes Servicemen's Group Life Insurance: \$16.8 billion in 1970, \$1.7 billion in 1975, \$44.5 billion in 1981, and \$50.8 billion in 1986; as well as Federal Employees' Group Life Insurance: \$81.5 billion in 1981 and \$10.8 billion in 1986. ²Includes operations of accident and health departments of life insurance companies. ³Beginning 1986, data not comparable to prior years due to change in accounting method. ⁴Net rate. ⁵Includes other obligations not shown separately. ⁶Includes reserves for supplementary contracts with and without life contingencies.

Source: American Council of Life Insurance, Washington, DC, *Life Insurance Fact Book*, biennial, and unpublished data.

Life Insurance Companies and Ownership

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No. 837. U.S. LIFE INSURANCE COMPANIES—NEW LONG-TERM INVESTMENTS: 1970 TO 1987

[In billions of dollars, except percent. Long-term investments are investments of over 1 year in length. Minus sign (-) indicates decrease]

ITEM	1970	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Total	23.9	42.5	66.6	68.8	72.6	77.9	83.7	110.5	169.9	202.5	295.3	421.9	456.7
Annual percent change ¹	-3	19.7	20.3	3.2	5.6	7.3	7.4	32.1	53.7	19.2	45.8	42.9	8.3
Government securities .....	.8	3.7	7.5	6.5	6.9	7.0	10.6	24.3	49.1	62.9	99.9	154.3	155.7
Corporate securities.....	10.9	22.5	37.8	36.0	33.5	36.4	42.5	58.8	86.9	104.0	144.6	205.4	239.5
Bonds.....	6.8	16.6	30.2	28.0	23.1	22.3	23.0	33.0	50.8	66.7	98.3	137.5	165.1
Stocks.....	4.1	5.9	7.8	8.0	10.4	14.1	19.5	25.8	36.1	35.3	46.3	67.9	74.4
Mortgages.....	7.2	9.6	14.2	17.8	20.7	19.7	13.5	11.5	20.1	20.1	35.1	45.4	44.2
Real estate .....	.9	2.1	2.0	2.2	2.8	3.3	4.5	4.5	4.3	6.0	6.0	7.1	7.1
Policy loans.....	4.1	4.6	5.1	6.3	8.7	11.5	12.6	11.4	9.5	9.5	9.7	9.7	10.2

¹ Change from immediate prior year.

No. 838. LIFE INSURANCE IN FORCE IN THE U.S.—SUMMARY: 1970 TO 1987

[As of December 31 or calendar year, as applicable. Covers life insurance with life insurance companies only. Represents all life insurance in force on lives of U.S. residents whether issued by U.S. or foreign companies. For definition of household, see text, section 1. See also *Historical Statistics, Colonial Times to 1970*, series X 879-889]

YEAR	LIFE INSURANCE IN FORCE					AVERAGE SIZE POLICY IN FORCE (dollars)				AVERAGE AMOUNT (\$1,000)		Disposable personal income per household (\$1,000)	
	Num- ber of poli- cies, total (mil.)	Value (bil. dol.)				Ordin- ary	Group	Indus- trial	Cred- it ¹	Per house- hold	Per in- su- red house- hold		
		Total	Ordin- ary	Group	Indus- trial								
1970.....	355	1,402	731	545	38.6	87.9	6,110	6,910	500	1,000	22.1	26.6	11.3
1974.....	380	1,985	1,009	827	39.4	109.6	7,680	8,840	550	1,310	28.4	34.2	14.9
1975.....	380	2,140	1,083	905	39.4	112.0	8,090	9,380	570	1,410	30.1	36.2	16.1
1976.....	382	2,343	1,178	1,003	39.2	123.6	8,610	10,010	580	1,580	32.2	38.7	17.2
1977.....	390	2,583	1,289	1,115	39.0	139.4	8,240	10,550	590	1,760	34.8	42.0	18.6
1978.....	401	2,870	1,425	1,244	38.1	163.1	10,010	11,280	600	1,950	37.8	45.5	20.4
1979.....	407	3,222	1,586	1,419	37.8	179.3	10,890	12,350	610	2,120	41.7	50.8	22.4
1980.....	402	3,541	1,761	1,579	36.0	165.2	11,920	13,410	620	2,110	43.8	53.5	23.7
1981.....	400	4,064	1,978	1,889	34.5	162.4	13,310	15,400	630	2,220	49.3	60.2	25.8
1982.....	390	4,477	2,217	2,066	32.8	161.1	15,140	16,630	630	2,410	53.6	66.2	27.1
1983.....	387	4,966	2,544	2,220	31.4	170.7	17,380	17,630	630	2,650	59.2	73.1	28.9
1984.....	385	5,500	2,988	2,392	30.1	190.0	19,970	18,780	630	2,980	64.5	79.6	31.3
1985.....	386	6,053	3,247	2,562	28.2	216.0	22,780	19,720	640	3,100	69.7	86.1	32.7
1986.....	391	6,720	3,658	2,801	27.2	233.6	25,540	20,720	650	3,310	76.0	93.8	34.2
1987.....	395	7,452	4,139	3,043	26.6	243.0	28,510	22,380	650	3,330	82.8	102.2	35.3

¹ Insures borrower to cover consumer loan in case of death.

Source of tables 837 and 838: American Council of Life Insurance, Washington, DC, *Life Insurance Fact Book*, biennial.

No. 839. LIFE INSURANCE OWNERSHIP BY HOUSEHOLDS AND ADULTS: 1984

[“All types” includes coverage with legal reserve life insurance companies, veterans life insurance, and life insurance issued by savings banks, fraternal organizations, mutual aid and burial societies, and similar types of coverage. “Individual life” comprises ordinary and/or industrial life insurance. Based on a survey conducted for the source and the Life Insurance Marketing and Research Association]

TYPE OF HOUSEHOLD AND HOUSEHOLD INCOME	PERCENT OF HOUSEHOLDS IN WHICH AT LEAST ONE MEMBER OWNS LIFE INSURANCE			MEDIAN COVERAGE ² (\$1,000)			AGE	PERCENT OF ADULTS OWNING LIFE INSURANCE		
	All types	Individual life ¹	Employee group life	All types	Individual life ¹	Employee group life		Male	Female	
Total.....	81	57	54	35.0	16.5	20.0	Total, 18 yrs. and over.....	75	65	
Family households ³	85	63	58	40.0	20.0	20.0	18-24 yrs. old.....	61	50	
Married couple.....	88	66	60	45.0	23.0	21.5	25-29 yrs. old.....	63	64	
Female householder.....	74	47	49	20.0	11.0	20.0	30-34 yrs. old.....	79	70	
Nonfamily households.....	70	42	41	11.5	5.0	16.5	35-44 yrs. old.....	84	70	
Male householder.....	70	41	48	40.0	11.4	30.0	45-54 yrs. old.....	86	72	
Female householder.....	70	43	37	6.0	2.0	10.0	55-64 yrs. old.....	86	71	
Under \$10,000.....	63	46	27	10.0	5.1	10.0	65 yrs. old and over.....	69	57	
\$10,000-\$17,499.....	78	49	46	16.5	8.5	12.0				
\$17,500-\$24,999.....	87	64	60	30.0	16.4	15.0				
\$25,000-\$34,999.....	92	66	70	56.5	25.0	28.0				
\$35,000 and over.....	92	66	74	87.0	40.0	45.0				

¹ Purchased from an agent, company, or fraternal society. ² Among those households with this type of coverage. Includes coverage of dependents. ³ Includes male householder with no spouse present. *With no spouse present.

Source: American Council of Life Insurance, Washington, DC, *Life Insurance Fact Book Update, 1985*.

NO. 840. LIFE INSURANCE—INSURANCE IN FORCE AND BENEFIT PAYMENTS BY STATE: 1986

(Applies to policyholders and payments in the U.S. For composition of regions, see fig. I, inside front cover)

REGION, DIVISION, AND STATE	INSURANCE IN FORCE			DIVISION AND STATE	INSURANCE IN FORCE			Benefit pay- ments ¹ (mil. dol.)	
	Policies (1,000)	Value (bil. dol.)	Avg. per house- hold (dol.)		Policies (1,000)	Value (bil. dol.)	Avg. per house- hold (dol.)		
U.S.	394,883	7,452	82,800	71,432	South Atlantic— Con.				
Region:				Maryland.....	8,192	154	92,700	1,534	
Northeast.....	83,229	1,686	89,800	19,665	District of Columbia.....	2,053	46	185,600	337
Midwest.....	97,407	1,854	83,700	18,907	Virginia.....	13,284	203	93,500	1,471
South.....	154,709	2,498	80,800	20,562	West Virginia.....	3,090	40	56,900	435
West.....	59,538	1,416	77,800	12,298	North Carolina.....	13,498	186	77,900	1,517
New England.....	20,893	443	92,500	4,567	South Carolina.....	7,757	96	79,800	664
Maine.....	1,935	31	68,800	291	Georgia.....	12,646	208	92,200	1,427
New Hampshire.....	1,667	33	85,000	305	Florida.....	17,921	322	67,300	3,275
Vermont.....	852	15	73,600	169	East South Central.....	32,949	412	73,800	3,325
Massachusetts.....	8,755	200	91,300	2,108	Kentucky.....	6,069	86	62,800	710
Rhode Island.....	1,823	31	85,300	304	Tennessee.....	9,986	143	78,600	1,348
Connecticut.....	5,861	133	111,700	1,390	Alabama.....	12,704	123	83,200	849
Middle Atlantic.....	62,336	1,243	88,900	15,098	Mississippi.....	4,188	60	65,600	418
New York.....	27,858	590	87,800	7,498	West South Central.....	42,006	803	83,100	6,339
New Jersey.....	12,042	286	102,000	3,365	Arkansas.....	2,766	47	53,000	401
Pennsylvania.....	22,336	367	82,500	4,235	Louisiana.....	9,065	129	82,600	1,031
East North Central.....	69,832	1,304	84,200	13,690	Oklahoma.....	4,445	87	96,700	916
Ohio.....	18,451	334	82,900	3,483	Texas.....	25,730	540	90,500	3,991
Indiana.....	9,099	161	78,500	1,641	Mountain.....	19,007	370	77,500	3,214
Illinois.....	19,907	388	90,800	4,180	Montana.....	1,109	21	67,800	197
Michigan.....	14,510	283	84,400	2,981	Idaho.....	1,308	23	65,000	215
Wisconsin.....	7,865	138	77,100	1,425	Wyoming.....	630	13	74,900	125
West North Central.....	27,575	550	82,500	5,217	Colorado.....	5,303	113	90,000	942
Minnesota.....	6,221	138	87,500	1,252	New Mexico.....	1,858	36	68,400	308
Iowa.....	4,578	86	80,200	998	Arizona.....	5,057	94	75,400	865
Missouri.....	8,324	153	79,100	1,402	Utah.....	2,437	45	87,600	364
North Dakota.....	991	21	84,300	154	Nevada.....	1,305	25	62,800	198
South Dakota.....	905	19	73,000	178	Pacific.....	40,531	1,046	77,900	9,084
Nebraska.....	2,427	52	84,600	525	Washington.....	5,025	125	71,100	1,135
Kansas.....	4,129	80	84,700	708	Oregon.....	3,310	68	63,300	674
South Atlantic.....	79,754	1,281	81,800	10,898	California.....	29,674	800	79,400	6,832
Delaware.....	1,313	26	109,000	238	Alaska.....	656	15	84,800	123
Hawaii.....				Hawaii.....	1,866	38	112,000	320	

¹ Comprises death payments, matured endowments, disability and annuity payments, surrender values, and policy dividends.Source: American Council of Life Insurance, Washington, DC, *Life Insurance Fact Book*, biennial.

NO. 841. PROPERTY AND LIABILITY INSURANCE: 1970 TO 1987

[In millions of dollars. Premiums written represent total premiums on all insurance policies written by companies, with inception dates in years shown. Minus sign (-) indicates loss. See also *Historical Statistics, Colonial Times to 1970*, series X 918, 923, 928, 933, and 940.]

ITEM	1970	1975	1980	1982	1983	1984	1985	1986	1987
Premiums written ¹	32,867	49,967	95,569	103,968	108,983	118,166	144,186	176,552	193,246
Auto liability.....	8,958	13,315	23,319	26,226	28,080	30,217	36,087	44,081	49,205
Physical damage, auto.....	4,824	7,623	15,833	18,005	19,748	21,786	25,247	29,906	31,995
Liability, other than auto.....	2,140	3,981	7,692	7,159	7,247	8,254	14,913	22,857	24,878
Medical malpractice.....	(NA) 895	1,276	1,490	1,568	1,775	2,769	3,492	4,004	
Fire ²	3,147	3,691	4,784	4,836	4,800	4,853	6,173	6,833	7,656
Homeowners multiple peril.....	2,565	4,723	9,821	11,747	12,512	13,213	14,066	15,222	16,653
Commercial multiple peril.....	1,331	3,176	6,886	7,009	7,293	8,287	12,097	16,190	17,231
Workers' compensation.....	3,492	6,186	14,239	13,945	14,005	15,108	17,048	20,431	23,429
Inland marine.....	812	1,266	2,291	2,510	2,649	3,017	3,672	3,899	4,120
Ocean marine.....	465	861	1,065	1,101	1,096	1,155	1,177	1,225	1,355
Surety and fidelity ³	582	789	1,248	1,454	1,649	1,997	2,853	2,116	2,450
Financial guaranty ³	(NA) (NA)	(NA) (NA)	(NA) (NA)	(NA) (NA)	(NA) (NA)	(NA) (NA)	575	582	
Burglary and theft.....	135	120	136	115	106	109	122	121	127
Crop-hail.....	125	312	417	532	444	509	447	379	351
Boiler and machinery.....	115	173	293	293	356	439	618	531	596
Glass.....	40	32	32	29	27	28	25	27	25
Statutory underwriting gain/loss.....	77	-3,594	-1,712	-8,303	-11,088	-19,379	-22,597	-13,748	-7,078
Policyholders' dividends.....	504	633	1,622	1,987	2,234	2,098	2,196	2,165	2,546
Net underwriting gain/loss.....	-426	-4,227	-3,334	-10,290	-13,322	-21,477	-24,794	-15,913	-9,625
Net investment income.....	2,005	4,150	11,063	14,907	15,973	17,660	19,508	21,924	23,980
Net income/loss before taxes.....	1,579	-77	7,730	4,617	2,651	-3,817	-5,286	6,012	14,336
Assets.....	58,594	94,118	197,661	231,693	249,121	264,734	311,365	374,088	426,711
Policyholders' surplus.....	18,520	25,303	52,196	60,395	65,806	63,809	75,511	94,288	103,996

¹ Total includes all property, liability, and allied lines; other data are for principal lines only.² Includes extended coverage and allied lines.³ Prior to 1986, financial guaranty was included in surety.Source: Insurance Information Institute, New York, NY, *Insurance Facts*, annual. Data from A. M. Best Company, Oldwick, NJ.

NO. 842. AUTOMOBILE INSURANCE: 1970 TO 1987

[In billions of dollars, except as indicated. Premiums earned basis. See also *Historical Statistics, Colonial Times to 1970*, series Q 163-174.]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987		
										Total	Private passenger	Commercial
TOTAL INSURANCE												
Premiums earned.....	14.6	23.9	37.6	39.8	42.6	48.2	50.5	57.1	70.3	76.9	63.0	13.9
Losses paid.....	11.2	19.7	27.9	30.6	35.1	39.2	42.2	49.2	56.9	60.9	50.9	10.0
Percent of premiums.....	76.6	82.4	74.1	77.0	82.4	81.3	83.6	86.1	81.0	79.2	80.7	72.3
BODILY INJURY LIABILITY²												
Premiums earned.....	9.6	15.2	22.5	23.6	25.4	28.6	29.5	33.5	42.1	46.8	37.0	9.7
Losses paid.....	7.5	12.3	17.2	19.2	21.8	24.9	26.5	31.9	37.9	41.8	33.8	8.0
Percent of premiums.....	79.0	81.0	76.6	81.1	85.9	87.0	89.9	95.0	90.1	89.4	81.4	81.9
PHYSICAL DAMAGE³												
Premiums earned.....	5.1	8.7	15.1	16.1	17.2	19.6	21.0	23.5	28.2	30.1	26.0	4.1
Losses paid.....	3.7	7.4	10.7	11.5	13.1	14.3	15.7	17.3	19.0	19.1	17.0	2.0
Percent of premiums.....	72.3	84.7	70.4	71.0	76.3	72.9	74.7	73.5	67.5	63.4	65.6	49.5

¹ Includes adjusting expenses. ² Includes property damage. ³ Covers auto fire, theft, collision, and comprehensive.

Source: The National Underwriter Co., Cincinnati, OH, *Argus F. C. & S. Chart*, annual (copyright).

NO. 843. PRIVATE HEALTH INSURANCE ORGANIZATIONS—INCOME AND EXPENSES: 1970 TO 1985

[In millions of dollars, except percent. Minus sign (–) indicates loss. Expenses are on incurred basis. See also *Historical Statistics, Colonial Times to 1970*, series X 957-962]

ITEM	1970	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985
All organizations:											
Total premium income.....	16,871	33,178	48,016	53,577	62,011	72,595	84,419	98,679	109,684	121,464	130,139
Claims expense.....	15,320	31,223	42,959	49,078	56,905	67,504	78,400	89,929	97,990	104,863	113,000
Percent of premium income.....	90.8	94.1	89.5	91.6	91.8	93.0	92.9	91.1	89.3	86.3	86.8
Operating expense.....	2,269	3,969	5,227	5,874	6,740	7,938	8,378	11,242	12,808	14,271	16,252
Net underwriting gain.....	-718	-2,014	-169	-1,375	-1,634	-2,848	-3,559	-2,492	-1,114	2,330	886
Blue Cross-Blue Shield:											
Premium income.....	7,371	14,446	19,553	21,547	23,471	26,334	30,447	34,338	37,611	39,954	41,508
Claims expense.....	7,060	14,192	17,826	19,465	21,724	25,467	29,208	32,144	34,522	35,522	37,540
Operating expense.....	534	1,063	1,330	1,502	1,716	1,951	2,250	2,476	2,710	3,159	3,728
Net underwriting gain.....	-224	-809	397	580	31	-1,083	-1,012	-282	503	1,273	240
Insurance companies:¹											
Premium income.....	8,304	14,075	19,080	21,058	24,388	28,913	33,966	41,434	46,872	50,878	53,089
Claims expense.....	7,104	12,926	16,435	19,058	21,830	25,774	30,271	36,424	40,109	41,298	43,112
Net underwriting gain.....	-447	-1,374	-758	-1,780	-1,698	-1,848	-2,256	-2,397	-1,689	445	-128
Other plans:											
Premium income.....	1,196	4,657	9,403	10,971	14,154	17,347	20,006	22,907	25,201	30,632	35,542

¹ Excludes administrative service agreements and hospital indemnity. Hospital indemnity is a form of health insurance which provides a stipulated daily, weekly, or monthly indemnity during hospital confinement. Indemnity is payable on an unallocated basis without regard to actual expense of hospital confinement.

Source: U.S. Health Care Financing Administration, *Health Care Financing Notes*, Sept. 1987, and unpublished data.

NO. 844. HEALTH INSURANCE—PREMIUM INCOME AND BENEFIT PAYMENTS OF INSURANCE COMPANIES: 1970 TO 1986

[In billions of dollars. Beginning 1975, includes Puerto Rico and other U.S. outlying areas. Represents premium income of and benefits paid by insurance companies only. Excludes Blue Cross-Blue Shield plans, medical-society sponsored plans, and all other independent plans]

ITEM	1970	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Premiums ¹	11.5	20.8	28.7	32.7	37.9	43.7	49.0	58.3	63.2	70.4	75.2	75.5
Group policies ²	8.1	15.9	23.2	26.9	31.7	36.8	42.5	50.0	54.9	60.8	64.4	65.9
Individual and family policies.....	3.4	4.8	5.4	5.8	6.2	8.9	6.5	8.3	9.6	10.8	9.6	9.6
Benefit payments.....	9.1	16.5	22.1	26.4	31.7	37.0	41.6	49.2	51.7	58.0	60.0	64.3
Group policies ¹	7.5	14.2	19.5	22.9	27.9	33.0	37.7	44.2	46.9	50.3	53.7	58.9
Individual and family policies.....	1.6	2.3	2.6	3.5	3.8	4.0	3.9	4.9	4.8	5.7	6.3	6.4
Type of coverage:												
Loss of income.....	1.8	2.7	3.1	3.4	4.7	5.3	5.2	5.5	4.9	5.2	5.6	5.6
Medical expense.....	7.1	13.2	17.8	21.2	24.8	26.9	33.0	39.6	42.4	45.9	49.0	53.4
Dental.....	.1	.6	1.5	1.8	2.2	2.8	3.5	4.0	4.4	4.9	5.3	5.3

¹ 1970 refers to written premiums; thereafter, refers to earned premiums. ² Beginning 1975, insurance company group premiums and benefit payments include administrative service agreements and minimum premium plans. Amounts for 1970 contain only a portion of these data.

Source: Health Insurance Association of America, Washington, DC, *Source Book of Health Insurance Data*, annual.

Figure 17.1
Establishments and Employees, by Employee Size
Class-Percent Distribution: 1986

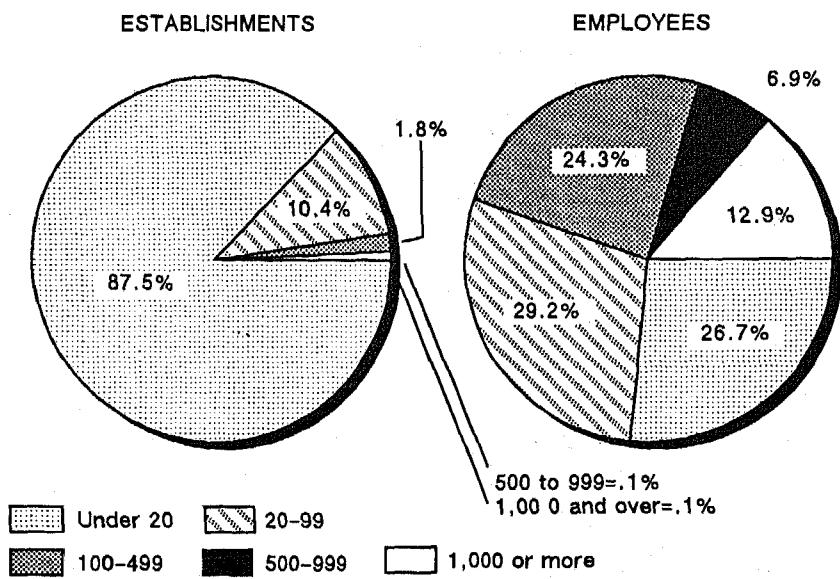
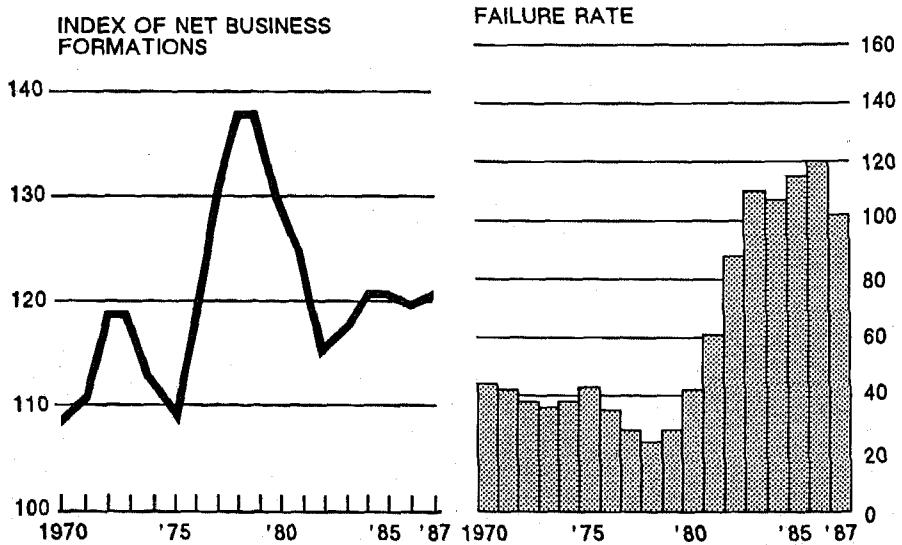


Figure 17.2
Index of Net Business Formations and Business
Failure Rates: 1970 to 1987

Index (1967=100)
 150

Rate per 10,000 concerns
 180



Source: Chart prepared by U.S. Bureau of the Census. For data see table 863.



Section 17

Business Enterprise

This section relates to the place and behavior of the business firm, and to business initiative in the American economy. It includes data on the number, type, and size of businesses; financial data of domestic and multinational U.S. corporations and their foreign affiliates; business investment, expenditures, and profits; business sales and inventories; consumer cooperatives; and business failures. Additional business data may be found in other sections, particularly 27 and 28.

The principal sources of these data are the *Survey of Current Business*, published by the Bureau of Economic Analysis (BEA); the *Federal Reserve Bulletin*, issued by the Board of Governors of the Federal Reserve System; the annual *Statistics of Income* reports of the Internal Revenue Service (IRS); *The Failure Record Through 1987*, issued by the Dun & Bradstreet Corporation, New York; and *Fortune* and *The Fortune Directory*, issued by Time, Inc., New York. Other sources are publications of the Securities and Exchange Commission (SEC), the Bureau of the Census, and the Administrative Office of the United States Courts.

Business firms.—A firm is generally defined as a business organization under a single management and may include one or more establishments (i.e., a single physical location at which business is conducted). The terms firm, business, company, and enterprise are used interchangeably throughout this section. Examples of series where the industrial distribution is based on data collected from establishments are those on capital stock (table 879), those on gross national product by industry (table 686), and those on employment and earnings (section 13). Examples of company-based series are those on business expenditures for new plant and equipment (table 878), those from IRS *Statistics of Income* (tables 855 and 856), and those on corporation profits by industry (tables 889 and 890). A firm doing business in more than one industry is classified by industry according to the major activity of the firm as a whole. The industrial classification is based on the *Standard Industrial Classification (SIC) Manual* (see text, section 13).

The IRS concept of a business firm relates primarily to the legal entity used for tax reporting purposes. The IRS *Statistics of Income* reports present data, based on a sample of tax returns before audit, separately for sole proprietorships, partnerships, and active corporations. A *sole proprietorship* is an unincorporated business owned by one person including large enterprises with many employees and hired managers to the part-time operations in which the owner is the only person involved. A *partnership* is an unincorporated business owned by two or more persons, each of whom has a financial interest in the business. The "persons" could be individuals, estates, trusts, other partnerships or corporations. A *corporation* is a business that is legally incorporated under State laws. The IRS recognizes many types of businesses as corporations, including joint-stock companies; mutual and other insurance companies; and unincorporated associations such as business trusts, etc. While many corporations file consolidated tax returns, most corporate tax returns represent individual corporations, some of which are affiliated through common ownership or control with other corporations filing separate returns.

Assets and liabilities.—In its annual report, *Statistics of Income, Corporation Income Tax Returns*, the IRS presents balance sheet and income estimates for all active U.S. corporations. The Bureau of the Census issues the *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations* (QFR), which presents quarterly income account and balance sheet data for manufacturing, mining, and trade industries. The Federal Reserve Board issues *Working Capital of U.S. Nonfinancial Corporations*, which presents data on components of current assets and liabilities of all nonfinancial U.S. corporations. Both of these reports were prepared by the Federal Trade Commission until responsibilities for QFR were transferred to Census beginning with the 4th quarter 1982 report.

One of the most comprehensive measures of the investment position of the business sector (and the only measure adjusted to current replacement cost) is the BEA capital stock series. See *Survey of Current Business*, August 1988.

Income, profits, dividends, and taxes.—Several agencies, among them IRS and BEA, compile corporate income account data. These data, however, are not comparable because of differing methods of compilation. A reconciliation of the two can be found in table 8.13 of *National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business* (normally the July issue), published by BEA. The IRS publishes financial data for all business enterprises. These data appear in *Statistics of Income—Corporation Income Tax Returns* and the *Statistics of Income Bulletin* (partnerships and sole proprietorships). Data on international income and taxes reported by U.S. corporations are also included in the *Statistics of Income Bulletin* and in the periodic *Compendium of Studies of International Income and Taxes*.

Corporate data issued by BEA are a part of its national income and product accounts (see text, section 14). The primary sources for BEA estimates of profits, taxes, dividends, and undistributed profits are the original corporate tax returns submitted to IRS. Various adjustments of IRS data are required by the national income treatment—particularly with respect to profits which would be disclosed if all tax returns were audited; depletion; capital gain or loss; treatment of bad debts; measurement of income received from abroad; and intercorporate dividends—to make the figures comparable with other entries in the national income accounts. For a discussion of two types of adjustments (inventory valuation and capital consumption), see text, section 14. The BEA's corporate profits data also include net earnings of Federal Reserve banks, credit unions, private noninsured pension funds, and several quasi-government credit agencies not included in IRS data.

Comparability of employment data.—Throughout various sections, employment statistics are presented by Bureau of the Census, Bureau of Labor Statistics, and Small Business Administration. Readers should note that all three data sources are not strictly comparable, due to differences in industrial coding and the treatment of closed businesses. In addition, the Small Business Administration omits startup retail and service businesses, and some mining firms are reported as owned by companies in the petroleum industry. Also, the classification of Bureau of the Census and Bureau of Labor Statistics data by establishment (not owning firm) produces some additional differences in industry classification.

NO. 845. EMPLOYMENT GROWTH BY MAJOR INDUSTRY FROM ALTERNATIVE SOURCES: 1980-1986

[In thousands, except percent change. Covers nonfarm, nongovernment employment. Minus sign (-) indicates decrease]

INDUSTRY	SMALL BUSINESS ADMINISTRATION			BUREAU OF LABOR STATISTICS			BUREAU OF THE CENSUS		
	Employment		Percent change 1980- 1986	Employment		Percent change 1980- 1986	Employment		Percent change 1980- 1986
	1980	1986		1980	1986		1980	1986	
Total.....	82,071	91,180	11.10	74,165	82,832	10.09	74,844	83,380	11.41
Agriculture, forestry, fishing	811	945	16.52	(NA)	(NA)	(NA)	290	412	42.07
Mining.....	1,128	1,137	.80	1,027	777	-24.34	994	847	-14.79
Construction.....	4,748	5,011	5.54	4,346	4,816	10.81	4,473	4,650	4.18
Manufacturing.....	24,417	22,875	-6.32	20,285	18,985	-6.51	21,185	19,142	-9.58
Transportation, communications, utilities.....	5,872	6,160	4.90	5,146	5,255	2.12	4,623	4,884	5.85
Wholesale trade.....	5,489	6,282	13.88	5,275	5,753	9.06	5,211	5,725	9.88
Retail trade.....	15,011	17,143	14.20	15,035	17,930	19.26	15,047	17,550	16.63
Finance, insurance, real estate.....	5,736	7,099	23.76	5,160	6,283	21.76	5,295	6,371	20.32
Services.....	18,849	24,549	30.24	17,890	23,053	28.86	17,186	22,878	33.12

NA Not available. ¹ Total includes nonclassifiable establishments, not shown separately.

Source: U.S. Small Business Administration, Office of Advocacy, *Small Business Data Base*, USEEM files, unpublished data, 1988; U.S. Bureau of Labor Statistics, *Employment, Hours and Earnings, United States, 1909-84*, and *Supplement to Employment and Earnings, 1988*; and U.S. Bureau of the Census, *County Business Patterns, U.S. Summary*, annual.

Sources and uses of corporate funds.—These data (table 895) show capital requirements of corporations and the manner in which they are financed. Sources of funds should be equal to their uses. Certain discrepancies, however, interfere with this equality due to omission of (1) money accruing to corporations from an excess of sales over purchases of used plant and equipment, (2) transactions in securities held as permanent investments except public offerings, and (3) net purchases of land. Also, the balance sheet data upon which many of the financial flow estimates are based are not fully comparable with the tax-return based estimates of internal sources, or the establishment series underlying the figures on inventory change.

Plant and equipment expenditures.—Estimates of actual and planned expenditures for new plant and equipment in the United States by most private nonagricultural business firms are based on quarterly sample surveys conducted by the Bureau of Economic Analysis.

For quarterly data, see current issues of the *Survey of Current Business*. For a discussion of coverage, concepts, and methodology, see the February 1985 issue of the *Survey*.

Sales and Inventories.—Sales are estimated aggregate values, and inventories are book values at the end of the period. Sales signifies sales or shipments for retail and wholesale trade and billings or shipments for manufacturing. Trade inventories are valued at cost of merchandise on hand, while manufacturers' inventories are valued at approximate current costs or at book values, as reported by the manufacturer. Inventories (see table 883) are based on data from censuses (conducted every five years, for years ending in "2" and "7") and annual surveys. Monthly data for manufacturing appear in the Bureau of the Census Current Industrial Reports, *Manufacturers' Shipments, Inventories, and Orders*, series M3-1; for data on retail and wholesale trade, see section 28.

Sales, assets, net income, stockholder's equity, and total returns to investors.—Sales include service and rental revenues but exclude dividends, interest, and other non-operating revenues. All companies must have derived more than 50 percent of their sales from manufacturing and/or mining. Sales of subsidiaries are included when they are consolidated. Assets are those shown at the company's year-end. Net Income is shown after taxes and after extraordinary credits or charges when any are shown on the income statement. Stockholder's equity is the sum of capital stock, surplus and retained earnings at the company's year-end. Redeemable preferred stock is excluded when its redemption is either mandatory or outside the control of the company, except in the case of cooperatives. Total returns to Investors include both price appreciation and dividend yield. Returns are adjusted for stock splits, stock dividends, recapitalizations, and corporate reorganizations as they occur. For further discussion, see Time, Inc., New York, NY, *The Fortune Directory*, May and June issues.

Economic censuses.—The economic censuses constitute comprehensive and periodic canvasses of the Nation's industrial and business activities. The first economic census of the United States was conducted as part of the 1810 decennial census, when inquiries on manufacturing were included with the census of population. Minerals data were collected in 1840. The first censuses of construction and business were taken for 1929. An integrated economic census program was begun for 1954. In that year, the censuses covered the retail and wholesale trades, selected service industries, manufactures, and mineral industries. The economic censuses are taken at 5-year intervals covering years ending in "2" and "7".

Statistical reliability.—For a discussion of statistical collection and estimation, sampling procedures, and measures of statistical reliability applicable to Census Bureau data, see Appendix III.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

Business Enterprise

NO. 846. NUMBER OF RETURNS, RECEIPTS, AND NET INCOME, BY TYPE OF BUSINESS: 1970 TO 1985

[Figures are estimates based on samples; see Appendix III. See also *Historical Statistics, Colonial Times to 1970*, series V 1-12. For further information regarding corporations, see table 854]

ITEM	Unl	1970	1975	1979	1980	1981	1982	1983	1984	1985
Number.....	1,000.....	12,001	13,979	16,187	16,793	13,658	14,546	15,245	16,077	16,920
Receipts.....	Bil. dol.	2,082	3,685	6,345	7,159	7,725	7,755	7,891	8,752	9,306
Net Income (less loss) ¹	Bil. dol.	109	196	361	302	264	198	245	301	310
Proprietorships, number ²	1,000.....	9,400	10,862	12,330	12,702	9,585	10,106	10,704	11,262	11,929
Business receipts ³	Bil. dol.	238	339	488	506	427	434	465	516	540
Net Income (less loss) ¹	Bil. dol.	33	45	61	55	53	51	60	71	79
Partnerships, number.....	1,000.....	936	1,073	1,300	1,380	1,461	1,514	1,542	1,644	1,714
Total receipts ⁴	Bil. dol.	93	147	258	292	272	287	291	376	368
Net income (less loss) ¹	Bil. dol.	10	8	15	8	-3	-7	-3	-3	-9
Corporations, number.....	1,000.....	1,665	2,024	2,657	2,711	2,812	2,926	2,999	3,171	3,277
Total receipts ⁴	Bil. dol.	1,751	3,199	5,589	6,361	7,026	7,024	7,135	7,861	8,398
Net income (less loss) ¹	Bil. dol.	66	143	285	239	214	154	188	233	240

¹ Net income (less loss) is defined differently by form of organization, basically as follows: (a) Proprietorships: Total taxable receipts less total deductions, including cost of sales and operations (except charitable contributions and owners' salary), investment and other income are excluded; (b) Partnerships: Total taxable receipts less total deductions, including cost of sales and operations (except foreign taxes and oil depletion), investment and other income (except capital gains); (c) Corporations: Total taxable receipts less total deductions, including cost of sales and operations; investment and other income, such as capital gains and income from foreign corporations considered received for tax purposes only; net income is before income tax. ² Through 1980, includes both individually owned businesses and farms; beginning 1981, includes only nonfarm businesses. ³ Receipts from sales and services; excludes capital gains and losses and other investment income not associated with taxpayer's business. ⁴ Receipts from sales and services plus investment income (for partnerships, excludes capital gains and losses).

Source: U.S. Internal Revenue Service, *Statistics of Income, Corporation Income Tax Returns*, and *Statistics of Income Bulletin*.

NO. 847. NUMBER OF RETURNS AND BUSINESS RECEIPTS, BY SIZE OF RECEIPTS AND TYPE OF BUSINESS: 1970 TO 1985

[Figures are estimates based on sample of unadjusted tax returns; see Appendix III. The industrial distribution is based on data collected from companies; see text, section 17. Due to minor variations in estimating techniques, totals differ slightly from those shown in other IRS tables in this section. See also *Historical Statistics, Colonial Times to 1970*, series V 1-12. For further information regarding corporations, see table 854]

SIZE-CLASS OF RECEIPTS	1970		1975		1980		1983		1984		1985	
	Returns (1,000)	Receipts (bil. dol.)	Returns (1,000)	Receipts (bil. dol.)	Returns (1,000)	Receipts (bil. dol.)	Returns (1,000)	Receipts (bil. dol.)	Returns (1,000)	Receipts (bil. dol.)	Returns (1,000)	Receipts (bil. dol.)
Corporate												
returns ^{1,2}	1,666	1,821	2,024	2,962	2,712	5,732	2,999	8,335	3,171	6,948	3,277	7,370
Under \$25,000.....	452	2	489	2	557	3	629	3	686	3	711	4
\$25,000-\$49,999.....	171	5	186	5	208	6	213	7	213	7	237	8
\$50,000-\$99,999.....	220	14	261	17	323	21	330	22	339	23	330	22
\$100,000-\$499,999.....	517	116	674	155	926	215	1,043	250	1,084	261	1,110	270
\$500,000-\$999,999.....	141	95	184	125	280	192	316	217	345	238	352	244
\$1,000,000 or more.....	165	1,391	250	2,658	418	5,294	468	5,835	505	6,417	538	6,823
Partnership												
returns ^{1,2}	936	90	1,073	146	1,380	286	1,541	243	1,843	318	1,714	303
Under \$25,000.....	502	3	550	4	638	4	781	2	820	2	840	2
\$25,000-\$49,999.....	125	4	140	5	182	7	177	3	197	4	195	3
\$50,000-\$99,999.....	120	8	133	10	184	13	204	8	200	8	200	8
\$100,000-\$499,999.....	162	33	204	44	290	64	282	42	313	46	356	49
\$500,000-\$999,999.....	17	12	26	17	48	33	54	25	61	27	67	29
\$1,000,000 or more.....	10	30	18	66	37	164	44	163	52	232	56	212
Non-farm proprietorship												
returns ^{1,2}	³ 6,494	199	³ 7,760	274	³ 9,730	411	10,704	465	11,262	516	11,929	540
Under \$25,000.....	4,738	30	5,827	35	6,916	44	7,591	49	7,832	52	8,250	54
\$25,000-\$49,999.....	746	27	850	30	1,079	39	1,187	42	1,261	45	1,394	50
\$50,000-\$99,999.....	562	40	645	45	836	59	919	65	1,061	74	1,094	77
\$100,000-\$499,999.....	420	76	590	113	796	159	889	178	984	203	1,060	213
\$500,000-\$999,999.....	21	14	35	24	74	50	83	57	86	61	89	61
\$1,000,000 or more.....	7	12	13	26	29	81	35	74	87	81	41	85

¹ Includes firms with no receipts. ² Business receipts. Active firms only. ³ Number of businesses. Number of non-farm sole proprietorship returns is not available prior to 1981. However, the number of returns and the number of businesses are very closely related. Since 1970, the ratio of number of returns to the number of businesses has remained approximately 1 to 1.1.

Source: U.S. Internal Revenue Service, *Statistics of Income, Statistics of Income Bulletin*, and unpublished data.

Business Returns, Receipts, and Net Income

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No. 848. NUMBER OF RETURNS, RECEIPTS, AND NET INCOME, BY TYPE OF BUSINESS AND INDUSTRY: 1985

[See headnote, table 847. For further information regarding corporations, see table 854. See *Historical Statistics, Colonial Times to 1970*, series V 42-53, for number of active corporations. Minus sign (-) indicates net loss]

INDUSTRY	NUMBER OF RETURNS (1,000)			BUSINESS RECEIPTS ¹ (bil. dol.)			NET INCOME (less loss) ² (bil. dol.)		
	Nonfarm proprietor- ships	Active partner- ships	Active corpora- tions	Nonfarm proprietor- ships	Active partner- ships	Active corpora- tions	Nonfarm proprietor- ships	Active partner- ships	Active corpora- tions
Total ³	11,929	1,714	3,277	540.0	302.7	7,369.5	78.8	-8.9	240.1
Agriculture, forestry, and fishing ⁴	319	136	103	11.9	6.5	65.4	.9	-1.0	~-1
Mining	176	62	41	12.5	19.9	128.7	.5	1.5	-2.5
Construction	1,454	57	318	70.8	21.4	374.6	11.1	2.2	4.4
Manufacturing	326	30	277	16.9	22.5	2,556.3	1.3	-1.1	113.8
Transportation, public utilities	546	25	138	25.9	11.2	733.9	2.4	-3.1	25.1
Wholesale and retail trade ⁵	2,289	201	917	205.4	69.0	2,408.2	8.3	2.0	33.1
Wholesale	281	27	310	31.0	23.5	1,187.6	2.5	1.5	16.0
Retail	1,956	173	604	172.5	45.4	1,216.6	6.5	1.5	17.2
Finance, insurance, real estate	1,014	844	518	31.4	6 92.3	1,182.0	9.8	-25.9	60.7
Services	5,532	341	939	157.3	104.1	498.0	43.0	16.5	5.9

¹ See footnote 3, table 846. ² See footnote 1, table 846. ³ Includes business not specifically allocated to industries below. See also exception in footnote 6. ⁴ Represents agricultural services only. ⁵ Includes trade business not identified as wholesale or retail. ⁶ Includes total receipts from all sources (including investment income) for businesses in this category; therefore, the industry detail in this column exceeds the total.

Source: U.S. Internal Revenue Service, *Statistics of Income*, various publications.

No. 849. NUMBER OF RETURNS, RECEIPTS, AND NET INCOME, BY INDUSTRY, TYPE OF BUSINESS, AND SIZE OF BUSINESS RECEIPTS: 1985

[Number in thousands; receipts and net income in millions of dollars. Figures are estimates based on a sample of unaudited tax returns; see Appendix III. The industrial distribution is based on data collected from establishments; see text, section 17. See *Historical Statistics, Colonial Times to 1970*, series V 42-53, for number of active corporations. Minus sign (-) indicates net loss]

INDUSTRY	Non- farm pro- prietor- ships ¹ total	ACTIVE PARTNERSHIPS				ACTIVE CORPORATIONS				\$50,000,000 or more
		Under \$100,000 ² \$499,999	\$100,000- \$499,999	\$500,000 or more	Under \$1,000,000 ² \$4,999,999	\$1,000,000- \$4,999,999	\$5,000,000- \$9,999,999	\$10,000,000- \$49,999,999		
All Industrial divisions: ³										
Number	11,929	1,235	356	123	2,740	408	65	53	11	
Business receipts ⁴	540,045	12,763	49,481	240,489	546,880	832,403	427,259	876,236	4,586,782	
Net income (less loss)	78,772	-20,176	1,655	9,637	-3,521	10,262	7,796	26,274	189,307	
Agriculture, forestry, fishing: ⁵										
Number	319	126	8	2	94	8	1	1	(z)	
Business receipts ⁴	11,927	416	1,673	4,440	16,382	15,754	5,657	11,760	15,866	
Mining:										
Number	176	50	9	3	36	4	1	1	(z)	
Business receipts ⁴	12,503	621	2,012	17,288	4,698	9,289	4,787	12,531	95,406	
Construction:										
Number	1,454	30	22	5	254	53	7	4	73,561	
Business receipts ⁴	70,790	1,146	5,178	15,152	63,865	108,278	48,844	80,042	2,126,617	
Manufacturing:										
Number	326	17	10	3	185	63	14	12	3	
Business receipts ⁴	16,937	259	2,027	20,301	48,768	140,509	95,623	244,828	619,083	
Transportation, public utilities:										
Number	546	18	4	2	115	18	3	2	1	
Business receipts ⁴	25,886	806	892	9,555	22,363	38,672	17,420	36,406	1,150,119	
Wholesale and retail trade:										
Number	2,289	107	71	23	685	175	29	25	4	
Business receipts ⁴	205,412	3,140	15,577	50,362	187,413	378,718	203,911	488,015	389,347	
Finance, insurance, real estate:										
Number	1,014	654	138	52	479	26	6	6	2	
Business receipts ⁴	31,418	956	4,041	40,915	34,554	25,515	11,843	40,735	116,124	
Services:										
Number	5,532	221	88	32	869	61	6	3	1	
Business receipts ⁴	157,334	5,251	17,244	81,701	167,417	114,544	38,888	81,009		

¹ Less than 500 returns. ² Individually owned businesses. ³ Includes businesses not allocable to individual industries. ⁴ Represents receipts from sales and services. ⁵ Excludes investment income reflected in table 848 for partnerships and corporations. ⁶ Represents agricultural services only.

Source: U.S. Internal Revenue Service, *Statistics of Income*, various publications and unpublished data.

NO. 850. NONFARM SOLE PROPRIETORSHIP RETURNS—SELECTED INCOME AND DEDUCTION ITEMS:
1970 TO 1986

[In millions of dollars, except as indicated. All figures are estimates based on sample. Tax law changes have affected the comparability of the data over time. See *Statistics of Income* reports for a description of appropriate years tax law changes; see Appendix III. See also *Historical Statistics, Colonial Times to 1970*, series V 4-6]

ITEM	1970	1975	1980	1982	1983	1984	1985	1986
Number of returns, total (1,000).....	5,770	7,221	2,8932	2,10,106	10,704	11,262	11,929	12,393
Businesses with net income (1,000).....	(NA)	(NA)	(NA)	6,761	7,380	8,003	8,641	9,248
Inventory, end of year	11,061	15,578	21,996	21,805	(NA)	23,233	24,970	24,477
Business receipts, total³.....	198,582	273,955	411,206	433,665	465,169	516,037	540,045	559,384
Income from sales and operations.....	(NA)	272,343	407,169	428,312	455,382	507,234	528,575	548,273
Business deductions, total³.....	168,045	234,318	356,258	383,092	404,808	445,270	461,273	468,980
Cost of goods sold/operations.....	109,149	146,281	209,890	205,471	212,631	229,908	232,294	232,135
Purchases.....	88,586	117,722	168,302	161,295	(NA)	(NA)	(NA)	(NA)
Labor costs	7,704	8,791	10,922	11,425	9,871	13,009	14,504	17,318
Materials and supplies.....	6,216	9,091	12,908	12,736	(NA)	(NA)	(NA)	(NA)
Commissions.....	1,274	2,226	3,333	4,464	(NA)	(NA)	(NA)	5,461
Salaries and wages (net).....	15,107	20,228	26,561	30,403	31,686	34,886	38,286	38,691
Car and truck expenses.....	(NA)	(NA)	13,378	(NA)	14,758	17,524	17,044	18,381
Rent paid.....	4,637	6,676	9,636	11,797	11,831	14,278	15,259	15,654
Repairs.....	2,445	3,044	5,032	6,008	(NA)	(NA)	(NA)	(NA)
Taxes paid.....	3,776	5,424	7,672	7,748	(NA)	(NA)	(NA)	(NA)
Utilities	(NA)	(NA)	4,790	(NA)	(NA)	(NA)	(NA)	(NA)
Insurance.....	2,310	3,504	6,003	6,448	(NA)	(NA)	(NA)	10,783
Interest paid.....	1,784	3,391	7,190	10,143	9,926	11,025	11,914	11,504
Depreciation.....	5,452	7,958	13,953	19,122	22,070	23,900	26,291	26,418
Pension and profit sharing plans	73	125	141	136	123	258	311	638
Net income (less loss).....	30,537	39,637	54,947	50,573	60,359	70,767	78,773	90,423
Businesses with net income	33,736	45,625	68,010	68,847	78,618	89,849	98,776	110,497

NA Not available. ¹Preliminary. ²Includes break-even businesses. ³Includes other amounts not shown separately.

Source: U.S. Internal Revenue Service, *Statistics of Income Bulletin*.

NO. 851. PARTNERSHIP RETURNS—SELECTED INCOME STATEMENT AND BALANCE SHEET ITEMS:
1970 TO 1986

[In millions of dollars, except as indicated. All figures are estimates based on samples. See headnote, table 850. See also Appendix III and *Historical Statistics, Colonial Times to 1970*, series V 7-9]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986
Active partnerships, number (1,000).....	936	1,073	1,380	1,461	1,514	1,542	1,644	1,714	1,703
Number with net income (1,000).....	640	661	774	749	791	784	845	876	851
Number with balance sheets (1,000).....	556	783	1,194	1,198	1,223	1,191	1,215	1,227	1,203
Number of partners (1,000).....	3,698	4,951	8,420	9,448	9,785	10,589	12,427	13,245	15,229
Assets, total¹.....	116,753	235,468	597,504	715,233	845,281	886,993	1,030,849	1,269,434	1,403,760
Depreciable assets (net)....	(NA)	113,125	239,140	367,270	310,846	345,897	581,643	695,879	779,936
Inventories, end of year	(NA)	11,995	33,218	59,850	100,729	77,059	61,768	27,279	47,368
Land.....	(NA)	36,732	70,241	76,333	87,820	98,427	122,037	152,179	178,142
Liabilities, total¹.....	(NA)	193,878	488,734	580,034	701,630	745,153	855,373	1,289,434	1,175,727
Accounts payable	(NA)	12,302	33,899	29,092	37,255	34,725	32,780	46,872	43,622
Short-term debt ³	(NA)	22,709	48,002	55,692	73,278	67,295	88,626	102,760	92,457
Long-term debt ⁴	(NA)	136,297	178,044	186,509	236,218	268,268	322,327	381,961	429,196
Nonrecourse loans.....	(NA)	(*)	118,910	138,134	154,509	194,829	260,167	327,558	365,044
Partner's capital accounts	(NA)	41,593	108,770	135,199	143,651	141,840	175,476	200,213	226,023
Total receipts ¹	93,348	148,418	291,998	272,130	296,890	291,319	375,193	367,117	397,302
Business receipts.....	90,209	142,506	271,109	230,027	261,609	243,248	318,342	302,793	327,429
Interest received ⁶	942	2,447	10,869	13,773	15,260	15,006	16,851	20,559	21,716
Deductions, total¹.....	83,558	140,680	283,749	274,865	304,005	293,929	378,693	376,001	414,673
Cost of goods sold/operations.....	46,041	64,673	113,886	130,044	144,595	125,331	180,858	146,315	164,168
Salaries and wages.....	8,129	12,489	22,336	21,953	23,205	24,734	28,523	33,884	36,305
Taxes paid.....	3,159	5,771	9,653	5,040	5,289	5,910	6,673	7,746	7,886
Interest paid.....	4,470	12,097	28,362	19,586	21,517	22,364	25,438	28,683	29,452
Depreciation.....	4,579	10,108	21,576	27,263	32,362	37,340	19,782	22,576	23,446
Net income (less loss).....	9,790	7,738	8,249	-2,735	-7,318	-2,610	-3,500	-8,884	-17,371
Businesses with net income	14,419	22,432	45,062	50,567	53,557	60,308	69,697	77,045	80,215

NA Not available. ¹Includes other amounts not shown separately. ²Total assets, total liabilities, and partner's capital accounts are somewhat understated because not all partnership returns filed contained a complete balance sheet. ³Represents mortgages, notes, and bonds payable in less than one year. ⁴Represents mortgages, notes, and bonds payable in one year or more. ⁵Tax year 1975 long term debt included nonrecourse loans. ⁶Beginning 1982, includes both interest and dividends.

Source: U.S. Internal Revenue Service, *Statistics of Income Bulletin*, various publications.

Partnerships

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No. 852. PARTNERSHIPS—SELECTED ITEMS BY INDUSTRIAL DIVISION: 1980 TO 1986

[In millions of dollars, except partners and partnerships in thousands. Includes partnership not allocable by nature of business. Figures are estimates based on samples. See Appendix III]

INDUSTRY AND YEAR	NUMBER OF PARTNERSHIPS		Number of partners	Total assets	Business receipts ¹	Total deductions ²	Net income less loss ²	Net income	Net loss
	Total	With net income	With net losses						
All industries:									
1980.....	1,380	774	605	8,420	597,504	285,967	289,749	8,249	45,062
1982.....	1,514	791	723	9,765	845,281	284,037	304,005	-7,315	53,657
1983.....	1,542	784	758	10,589	886,993	278,347	293,929	-2,810	60,308
1984.....	1,644	845	799	12,427	1,030,849	357,803	378,693	-3,500	69,689
1985.....	1,714	876	838	13,245	269,434	349,169	376,001	-8,884	77,045
1986.....	1,703	851	851	15,229	1,403,750	343,511	414,673	-17,371	80,215
Agriculture, forestry, and fishing:									
1980.....	126	72	54	381	24,595	21,611	22,859	472	2,539
1982.....	133	68	65	450	24,814	5,004	8,403	-701	2,452
1983.....	137	73	63	466	24,717	5,949	8,772	-145	2,626
1984.....	139	73	66	494	26,739	5,886	9,242	-749	2,478
1985.....	136	76	60	585	27,027	6,529	10,495	-1,049	2,797
1986.....	147	78	69	642	24,748	6,085	9,825	-938	2,746
Mining:									
1980.....	35	15	20	722	24,742	13,201	18,248	-4,208	3,920
1982.....	56	23	33	1,574	45,550	17,563	28,628	-8,830	5,795
1983.....	60	24	36	2,083	49,775	17,077	23,586	-4,110	6,369
1984.....	57	31	26	2,007	52,415	16,638	21,985	69	7,857
1985.....	62	33	30	2,207	66,930	19,922	21,920	1,482	7,884
1986.....	53	23	30	2,351	66,969	14,749	21,290	-3,458	5,214
Oil and gas extraction:									
1980.....	31	14	17	686	18,881	9,252	13,659	-3,694	3,577
1982.....	51	22	29	1,512	38,048	13,717	23,525	-7,727	5,493
1983.....	56	23	33	1,988	41,067	13,226	19,048	-3,546	5,917
1984.....	51	27	24	1,833	41,266	14,177	16,674	787	7,349
1985.....	56	31	25	2,130	55,760	15,577	16,479	2,272	7,280
1986.....	49	22	27	2,270	55,987	10,995	16,382	-2,657	4,660
Construction:									
1980.....	67	51	16	180	9,811	18,407	17,202	1,560	2,119
1982.....	66	47	19	152	11,654	18,052	17,181	1,419	2,061
1983.....	64	46	18	149	14,965	21,623	20,758	2,168	3,087
1984.....	65	47	18	173	13,783	23,198	21,655	2,193	2,966
1985.....	57	41	16	134	15,008	21,476	20,080	2,207	2,743
1986.....	61	41	20	137	16,556	26,823	25,123	2,498	3,206
Transportation and public utilities:									
1980.....	20	11	10	73	9,291	5,868	5,821	248	1,092
1982.....	18	8	10	93	17,671	6,570	7,577	-781	1,098
1983.....	20	9	11	103	19,808	7,155	8,194	-703	1,128
1984.....	21	14	7	142	21,109	10,793	13,332	-2,007	1,280
1985.....	25	15	10	186	26,468	11,253	14,814	-3,066	1,360
1986.....	21	7	14	223	33,567	12,599	16,276	-3,029	1,682
Manufacturing:									
1980.....	30	20	10	92	11,252	15,327	16,142	-472	1,199
1982.....	23	14	9	77	13,022	14,824	15,980	-816	940
1983.....	26	12	14	91	13,966	14,179	15,291	-744	850
1984.....	30	15	15	94	19,574	18,326	20,046	-1,101	1,165
1985.....	30	12	18	105	24,838	22,588	24,225	-1,085	1,228
1986.....	28	17	11	108	25,299	22,227	23,187	-458	1,512
Wholesale and retail trade:									
1980.....	200	123	77	487	17,727	65,793	63,988	2,475	3,374
1982.....	205	118	87	491	19,279	69,736	68,980	1,601	3,043
1983.....	194	102	92	479	19,804	59,880	59,140	1,540	3,012
1984.....	185	98	87	444	21,222	72,335	71,707	1,666	3,238
1985.....	201	113	88	493	20,568	66,079	66,119	1,977	3,487
1986.....	174	105	69	409	23,007	68,495	67,216	2,272	3,717
Finance, insurance, and real estate:									
1980.....	637	313	325	5,586	454,531	87,133	91,382	-4,249	15,189
1982.....	726	334	392	5,757	647,465	85,905	97,061	-11,156	19,466
1983.....	730	327	403	5,927	670,225	76,784	89,889	-13,105	22,542
1984.....	791	350	441	7,408	770,457	94,362	113,808	-19,244	25,646
1985.....	844	369	475	7,755	979,787	92,309	118,237	-25,929	30,383
1986.....	853	350	503	9,459	1,068,220	112,594	145,574	-32,980	56,311
Real estate:									
1980.....	464	211	253	3,212	275,895	60,637	63,924	-3,287	8,125
1982.....	568	245	323	3,738	394,968	33,798	45,089	-11,100	11,940
1983.....	585	245	341	4,328	465,891	41,355	56,234	-14,879	14,601
1984.....	637	262	375	5,131	598,425	53,718	74,922	-21,204	18,548
1985.....	694	285	409	5,992	724,342	59,746	89,505	-29,759	21,007
1986.....	713	276	437	7,436	811,817	65,721	102,338	-36,617	22,512
Services:									
1980.....	263	169	94	938	45,510	58,627	48,106	12,424	15,649
1982.....	279	175	104	1,147	64,798	66,835	59,627	11,902	18,558
1983.....	306	188	118	1,275	73,186	75,069	67,639	12,457	20,570
1984.....	331	204	127	1,578	87,984	90,244	82,239	15,583	24,800
1985.....	341	207	134	1,713	106,597	104,197	96,202	16,541	26,942
1986.....	325	208	117	1,744	123,461	111,701	102,362	18,563	29,021

¹ Business plus investment receipts for partnerships in finance, insurance, and real estate, and business receipts for all other industries. ² Beginning 1982, the agriculture, forestry, and fishing industries are based on revised collection procedure. See source for detail.

Business Enterprise

No. 853. NONFINANCIAL CORPORATE BUSINESS-SECTOR BALANCE SHEET: 1970 TO 1987

[In billions of dollars. Represents year-end outstandings]

ITEM	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Total assets	1,305	2,210	3,077	3,516	4,001	4,461	4,632	4,854	5,202	5,456	5,716	6,022
Tangible assets (current cost)	935	1,652	2,311	2,618	2,988	3,363	3,509	3,611	3,850	3,997	4,145	4,350
Reproducible	823	1,487	2,076	2,352	2,671	2,993	3,107	3,186	3,386	3,502	3,616	3,798
Land	112	164	235	267	318	370	401	425	464	495	528	552
Financial assets	370	559	766	898	1,013	1,094	1,124	1,242	1,352	1,459	1,571	1,672
Liquid assets	69	125	160	188	214	255	297	351	388	415	472	513
Demand deposits and currency	44	54	58	60	65	65	74	80	87	97	108	106
Time deposits	5	22	31	36	42	60	72	88	101	111	121	139
Consumer credit	11	16	21	22	22	24	24	28	31	35	36	36
Mutual fund shares	1	1	1	1	2	2	3	5	7	13	15	18
Trade credit	195	256	367	437	486	509	493	555	602	637	649	661
Miscellaneous assets	94	160	217	252	290	308	306	303	324	360	389	413
Total liabilities	540	767	1,071	1,233	1,377	1,532	1,609	1,731	1,990	2,213	2,432	2,666
Credit market instruments	354	545	740	835	912	1,018	1,088	1,151	1,347	1,519	1,709	1,890
Profit taxes payable	11	14	25	27	25	19	4	10	11	9	10	10
Trade debt	162	180	264	317	356	387	392	433	467	500	503	522
Foreign direct investment in U.S.	13	28	42	54	83	109	125	137	165	185	209	244
Net worth	765	1,443	2,006	2,283	2,625	2,929	3,023	3,122	3,212	3,242	3,284	3,356

Source: Board of Governors of the Federal Reserve System, *Balance Sheets for the U.S. Economy*.

NO. 854. CORPORATION INCOME TAX RETURNS—SELECTED FINANCIAL ITEMS: 1970 TO 1985

[In billions of dollars, except number of returns. Federal returns and active corporations only. All corporations are required to file returns except those specifically exempt. See source for changes in law affecting comparability of historical data. Based on samples; see Appendix III. See also *Historical Statistics, Colonial Times to 1970*, series Y 381-392]

ITEM	1970	1975	1979	1980	1981	1982	1983	1984	1985
Number of returns, total (1,000)	1,665	2,024	2,578	2,711	2,812	2,828	2,999	3,171	3,277
Number with net income (1,000)	1,008	1,226	1,599	1,597	1,597	1,608	1,676	1,778	1,820
S Corporation returns ¹ (1,000)	257	358	519	545	541	564	648	701	725
BALANCE SHEET									
Assets, total²	2,635	4,287	6,845	7,617	8,547	9,368	10,201	11,107	12,773
Cash	177	290	482	529	533	541	590	596	683
Notes and accounts receivable	615	1,052	1,817	1,985	2,240	2,420	2,677	2,897	3,318
Inventories	190	318	504	535	588	581	599	664	715
Investments in Government obligations	197	316	421	472	515	606	685	726	917
Mortgage and real estate	328	548	841	894	934	942	982	1,127	1,259
Other investments	401	626	1,028	1,214	1,388	1,605	1,798	1,973	2,414
Depreciable assets	869	1,277	1,897	2,107	2,353	2,583	2,730	2,913	3,174
Depletable assets	19	39	58	72	84	95	108	115	112
Land	47	67	85	93	102	110	119	128	141
Liabilities²	2,635	4,287	6,835	7,617	8,547	9,368	10,201	11,107	12,773
Accounts payable	149	263	483	542	620	679	671	741	892
Mortgages, notes, and bonds ³	171	272	452	505	588	667	760	887	1,001
Mortgages, notes, and bonds ⁴	363	587	885	987	1,058	1,224	1,323	1,494	1,699
Capital stock	201	252	353	417	533	658	787	839	920
Paid-in or capital surplus	197	299	448	532	671	782	874	1,066	1,421
Retained earnings ⁵	366	568	969	1,070	1,170	1,228	1,274	1,308	1,366
Net worth	752	1,097	1,720	1,944	2,244	2,470	2,645	2,884	3,304
INCOME STATEMENT									
Receipts, total²	1,751	3,199	5,616	6,361	7,026	7,024	7,135	7,861	8,398
Business receipts	1,621	2,962	5,153	5,732	6,245	6,157	6,335	6,948	7,370
Interest ⁶	72	143	289	367	494	530	511	580	635
Rents and royalties	17	27	40	54	68	83	83	90	105
Deductions, total²	1,683	3,053	5,332	6,125	6,814	6,869	6,945	7,629	8,158
Cost of sales and operations	1,146	2,130	3,722	4,205	4,509	4,271	4,308	4,693	4,894
Compensation of officers	33	58	87	109	120	129	141	157	171
Rent paid on business property	24	41	64	72	82	95	105	19	135
Taxes paid	50	82	128	183	170	166	173	192	201
Interest paid	62	129	262	345	477	515	475	536	569
Depreciation	53	86	136	157	186	213	241	265	304
Advertising	18	27	46	52	60	65	72	82	92
Net Income (less loss), total	66	143	285	239	214	154	188	233	240
Net Income	64	169	322	297	301	274	297	349	364
Deficit	18	26	37	58	87	120	109	116	124
TAX ITEMS									
Income subject to tax	72	147	280	247	240	205	219	257	266
Income tax before credits ⁷	33	66	119	104	101	85	90	106	109
Tax credits, total²	5	26	54	42	44	40	40	44	46
Foreign tax credit	5	20	37	25	22	19	20	21	24
Income tax after credits⁷	28	39	65	62	57	45	51	62	61

NA Not available. ¹ Small business corporations. Represents corporations with no more than 35 shareholders (10 prior to 1983), most of which are individuals, electing to be taxed at the shareholder level. ² Includes items not shown separately. ³ Payable in less than one year. ⁴ Payable in one year or more. ⁵ Appropriated and unappropriated. ⁶ Includes tax-exempt interest on Government obligations issued by U.S. State and local governments. ⁷ Consists of regular and alternative tax; excludes minimum tax and adjustments for certain prior year credits. Tax year 1970 includes surcharge of \$784 million.

Source: U.S. Internal Revenue Service, *Statistics of Income, Corporations Income Tax Returns*, annual.

Corporation Income Tax Returns

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NO. 855. CORPORATION INCOME TAX RETURNS—FINANCIAL SUMMARY BY INDUSTRIAL DIVISION: 1970 TO 1985

[In billions of dollars, except as indicated. Industrial distribution based on data collected from companies; see text, section 17.
Excludes corporations not allocable by nature of business]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985
Agriculture, forestry, and fishing:								
Returns (1,000).....	37	56	81	85	91	92	98	103
Assets.....	11.9	21.2	40.7	46.1	50.4	50.3	50.7	52.7
Liabilities ¹	7.9	14.3	29.3	32.5	36.3	36.7	36.4	37.2
Receipts.....	14.3	28.1	52.1	65.1	65.4	59.2	66.6	70.5
Deductions.....	14.2	27.4	51.4	64.7	65.4	59.4	66.4	70.6
Net income (less loss).....	80.1	.7	.7	.3	(-z)	-2.2	.2	-.1
Mining:								
Returns (1,000).....	14	14	26	33	37	37	41	41
Assets.....	24.0	64.5	126.9	168.9	192.4	194.4	209.0	240.8
Liabilities ¹	10.6	31.7	72.9	98.4	112.5	108.8	114.7	136.0
Receipts.....	17.7	65.9	176.7	200.2	203.1	132.4	123.5	142.0
Deductions.....	15.8	42.3	169.1	195.0	203.0	134.3	124.6	145.4
Net income (less loss).....	1.8	23.6	7.8	5.6	.5	-1.6	-.4	-2.5
Construction:								
Returns (1,000).....	139	191	272	276	282	284	307	318
Assets.....	42.7	76.7	132.9	150.8	153.1	161.4	195.3	215.3
Liabilities ¹	30.8	57.7	100.1	113.7	114.2	119.8	144.9	160.6
Receipts.....	90.6	147.0	267.2	280.2	281.7	290.8	336.8	387.2
Deductions.....	89.1	144.7	262.1	276.7	279.6	288.6	335.7	382.8
Net income (less loss).....	1.5	2.2	6.3	3.5	2.3	2.3	2.9	4.4
Manufacturing:								
Returns (1,000).....	198	217	243	251	259	262	272	277
Assets.....	612.9	944.6	1,709.5	1,933.7	2,060.7	2,233.0	2,417.6	2,644.4
Liabilities ¹	304.0	562.0	980.3	1,085.5	1,163.8	1,279.9	1,392.6	1,544.7
Receipts.....	723.0	1,298.4	2,404.3	2,613.5	2,488.3	2,552.8	2,768.2	2,831.1
Deductions.....	692.5	1,230.7	2,290.6	2,509.1	2,423.3	2,469.3	2,661.2	2,733.1
Net income (less loss).....	31.8	68.4	125.7	116.8	75.8	95.3	121.2	113.8
Transportation and public utilities:								
Returns (1,000).....	67	81	111	109	115	123	128	138
Assets.....	287.7	443.2	758.4	887.3	919.9	998.9	1,084.9	1,246.4
Liabilities ¹	168.5	266.8	467.7	516.4	567.0	604.6	660.9	755.9
Receipts.....	135.6	243.5	523.8	598.5	632.3	657.4	725.6	772.4
Deductions.....	127.9	233.4	504.0	579.2	614.4	638.2	697.2	747.8
Net income (less loss).....	7.5	10.1	20.0	19.6	18.3	18.5	28.9	25.1
Wholesale and retail trade:								
Returns (1,000).....	518	615	800	817	840	852	897	917
Assets.....	192.2	323.5	646.9	708.1	753.4	804.2	899.0	1,010.0
Liabilities ¹	115.2	260.8	424.6	472.3	501.9	539.0	609.7	723.7
Receipts.....	522.5	969.9	1,955.5	2,039.6	2,017.7	2,119.4	2,307.6	2,473.9
Deductions.....	512.9	947.5	1,919.5	2,006.9	1,989.7	2,084.5	2,265.8	2,440.4
Net income (less loss).....	9.7	22.5	35.8	33.3	28.4	35.3	42.0	33.1
Finance, insurance, and real estate:								
Returns (1,000).....	406	412	493	470	462	480	497	518
Assets.....	1,401.2	2,322.0	4,022.2	4,486.2	4,987.5	5,487.2	5,939.0	7,029.5
Liabilities ¹	1,204.7	2,052.2	3,491.7	3,830.0	4,220.5	4,670.4	5,037.3	5,867.5
Receipts.....	177.3	315.8	697.5	877.8	949.9	902.8	1,033.1	1,182.0
Deductions.....	161.6	298.0	652.6	838.8	915.2	856.7	985.7	1,104.6
Net income (less loss).....	12.2	11.7	33.1	26.3	21.8	31.7	32.7	60.7
Services:								
Returns (1,000).....	281	436	671	753	820	848	899	939
Assets.....	61.9	90.5	178.2	219.7	237.9	269.8	307.9	331.0
Liabilities ¹	42.3	63.7	125.3	152.7	170.1	198.1	223.1	241.1
Receipts.....	69.6	131.4	279.9	346.8	380.8	416.5	490.3	534.6
Deductions.....	68.4	128.0	271.8	338.8	373.7	410.5	485.0	528.7
Net income (less loss).....	1.2	3.4	8.2	8.2	7.2	6.0	5.5	5.9
ANNUAL PERCENT CHANGE								
Receipts:								
Agriculture, forestry, and fishing.....	17.7	10.5	-2.4	24.9	.5	-9.4	12.8	5.8
Mining.....	9.3	1.7	33.3	13.3	1.5	-34.8	-6.7	15.0
Construction.....	8.0	7.2	5.7	4.9	.6	3.2	16.4	14.4
Manufacturing.....	1.8	(-z)	11.7	8.7	-4.8	2.6	8.4	2.3
Transportation and public utilities.....	8.2	9.6	17.5	14.3	5.6	4.0	10.3	6.4
Wholesale and retail.....	2.8	5.0	11.6	4.3	-1.1	5.0	8.9	7.2
Finance, insurance, and real estate.....	7.9	4.2	24.3	25.9	8.2	-5.0	14.4	14.4
Services.....	15.9	13.7	14.2	23.9	9.8	9.4	17.7	9.0

Z Less than half the measure. ¹ Liabilities does not include net worth.

Source: U.S. Internal Revenue Service, *Statistics of Income, Corporations Income Tax Returns*, annual.

NO. 856. ACTIVE CORPORATIONS—INCOME TAX RETURNS, BY ASSET SIZE-CLASS, AND BY INDUSTRY, 1985

[In millions of dollars, except returns. Excludes corporations not allocable by nature of business. The industrial distribution is based on data collected from companies; see text, section 17. Detail may not add to total because of rounding and the exclusion of data to prevent disclosure of individual taxpayer's identity. See table 854. See also *Historical Statistics, Colonial Times to 1970*, series V 157-183 and V 193-196.]

INDUSTRY AND ITEM	Total	ASSET SIZE-CLASS					
		Under 10 mil. dol. ¹	10-24.9 mil. dol.	25-49.9 mil. dol.	50-99.9 mil. dol.	100-249.9 mil. dol.	250 mil. dol. and over
Agriculture, forestry, and fishing: Returns...	103,156	102,791	236	75	33	16	5
Assets	52,651	39,483	3,550	2,482	2,245	2,232	2,660
Receipts	70,491	51,160	4,146	2,748	2,823	4,686	4,830
Deductions	70,559	51,521	4,170	2,759	2,917	4,638	4,553
Net Income (less loss)	-74	-392	-26	-12	5	54	294
Mining: Returns...	41,426	40,392	502	249	130	78	74
Assets	240,816	19,258	7,858	8,841	9,153	13,899	182,007
Receipts	142,039	24,935	5,313	6,038	4,975	9,464	91,314
Deductions	145,390	26,143	5,704	6,404	5,125	9,430	92,583
Net Income (less loss)	-2,543	-1,219	-401	-370	-153	26	-427
Construction: Returns...	318,276	316,318	1,327	405	140	48	39
Assets	215,298	111,773	19,750	13,751	10,868	7,254	51,903
Receipts	387,233	279,366	29,976	18,932	12,283	9,491	37,166
Deductions	382,823	276,216	29,542	18,847	12,270	9,431	36,517
Net income (less loss)	4,371	3,118	396	30	10	58	760
Manufacturing: Returns...	276,545	267,415	4,834	1,883	955	680	764
Assets	2,544,393	176,153	74,373	65,754	70,387	116,531	2,141,194
Receipts	2,631,082	427,657	129,340	101,600	101,521	153,097	1,917,261
Deductions	2,733,105	417,805	125,245	98,203	98,043	147,168	1,845,942
Net Income (less loss)	113,759	9,845	4,033	3,385	3,495	6,208	86,705
Transportation and public utilities:							
Returns	138,337	136,517	857	376	142	122	324
Assets	1,246,427	44,615	13,457	13,149	10,124	25,379	1,139,703
Receipts	772,258	109,533	17,630	14,673	10,898	20,876	598,748
Deductions	747,836	109,943	17,393	14,464	10,891	20,423	574,782
Net Income (less loss)	25,088	-415	296	207	70	457	24,534
Wholesale and retail trade: Returns...	917,301	910,804	4,301	1,256	520	377	244
Assets	1,009,966	351,642	64,491	43,477	36,917	63,343	450,095
Receipts	2,479,885	1,246,444	184,735	111,800	95,724	182,273	672,889
Deductions	2,440,403	1,236,115	181,984	110,225	94,211	159,614	658,255
Net Income (less loss)	33,127	10,303	2,739	1,563	1,509	2,675	14,338
Finance, insurance, and real estate:							
Returns	518,432	496,180	7,306	5,546	4,017	2,885	2,495
Assets	7,029,453	187,230	118,925	199,446	281,544	453,010	5,789,268
Receipts	1,182,034	136,414	32,946	35,970	50,139	90,807	835,324
Deductions	1,104,572	132,281	31,763	34,603	47,511	84,828	773,500
Net Income (less loss)	60,671	3,335	858	708	1,610	4,409	49,413
Services: Returns...	939,390	936,749	1,529	557	264	185	107
Assets	330,983	145,573	23,131	19,623	19,122	28,542	94,092
Receipts	534,588	373,333	27,969	20,909	21,263	24,249	66,884
Deductions	528,686	370,195	27,656	20,804	20,939	23,912	65,378
Net Income (less loss)	5,884	3,048	299	291	308	326	1,611

¹ Includes returns with zero assets.

Source: U.S. Internal Revenue Service, *Statistics of Income, Corporation Income Tax Return*, annual.

NO. 857. WORKING CAPITAL OF NONFINANCIAL CORPORATIONS: 1975 TO 1985

[In billions of dollars, except ratios. As of December 31. Covers all nonfinancial U.S. corporations]

ITEM	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Current assets...	756.3	823.1	900.9	1,028.1	1,200.9	1,281.6	1,374.5	1,425.4	1,557.3	1,703.0	1,778.5
Cash on hand and in banks ¹	80.0	86.8	94.3	103.7	116.1	121.0	126.6	144.1	165.8	173.6	188.0
U.S. Government securities	19.6	26.0	18.7	17.8	15.6	17.3	19.2	22.4	30.6	38.2	32.3
Receivables, total ²	272.1	292.4	325.0	381.9	456.8	491.2	528.0	511.0	577.8	633.1	671.2
Inventories	314.7	341.4	375.6	428.3	501.7	525.4	560.2	576.2	599.3	656.9	663.9
Other current assets	69.8	76.4	87.3	96.3	110.7	126.7	140.5	172.7	183.7	203.2	223.2
Current liabilities...	446.9	487.5	546.8	681.9	809.1	877.2	923.2	977.8	1,043.0	1,163.8	1,232.7
Payables	261.2	273.2	313.7	375.1	456.3	498.3	520.4	552.8	577.9	647.8	683.1
Other current liabilities	185.7	214.2	239.1	286.8	352.8	378.9	402.9	425.0	485.1	515.8	549.7
Net working capital	309.5	335.6	364.1	366.2	391.8	404.4	451.3	447.6	514.3	539.5	545.7
Liquidity ratio ³	.379	.368	.356	.329	.300	.302	.310	.347	.365	.355	.360
Current ratio ⁴	1.693	1.688	1.648	1.553	1.484	1.481	1.489	1.458	1.493	1.464	1.443

¹ Includes time certificates of deposits. ² Includes U.S. Government receivables. ³ Cash plus U.S. Government securities plus "other current assets," divided by "current liabilities." ⁴ "Current assets" divided by "current liabilities."

Source: Through 1981, U.S. Federal Trade Commission, thereafter, U.S. Bureau of the Census. Published quarterly in Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*.

Employees and Payroll

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NO. 858. ESTABLISHMENTS, EMPLOYEES, AND PAYROLL, BY INDUSTRY: 1975 TO 1986

[See headnote, table 859]

INDUSTRY	ESTABLISHMENTS (1,000)				EMPLOYEES (1,000)				PAYROLL (bil. dol.)			
	1975	1980	1985	1986	1975	1980	1985	1986	1975	1980	1985	1986
All industries ¹	4,114	4,543	5,701	5,807	60,519	74,844	81,111	83,380	596	1,035	1,514	1,609
Agricultural services ²	40	46	64	68	195	290	380	412	2	3	5	6
Mining.....	24	30	37	35	720	994	943	847	10	22	29	24
Contract construction.....	364	418	476	492	3,322	4,473	4,486	4,656	44	75	98	104
Manufacturing.....	306	319	358	355	18,372	21,165	19,429	19,142	213	355	458	468
Transportation ³	147	168	203	210	3,908	4,623	4,809	4,884	51	88	123	128
Wholesale trade.....	350	385	438	440	4,332	5,211	5,624	5,725	52	89	130	138
Retail trade.....	1,190	1,223	1,407	1,441	12,271	15,047	16,852	17,550	76	124	179	193
Finance and insurance ⁴	372	421	488	504	4,247	5,295	6,004	6,371	42	77	132	151
Services.....	1,118	1,278	1,712	1,811	12,655	17,186	21,549	22,878	102	197	346	381

¹ Includes nonclassifiable establishments, not shown separately. ² Includes forestry and fisheries. ³ Includes other public utilities. ⁴ Includes real estate.

Source: U.S. Bureau of the Census, *County Business Patterns*, annual.

NO. 859. ESTABLISHMENTS, EMPLOYEES, AND PAYROLL, BY EMPLOYMENT-SIZE CLASS AND INDUSTRY: 1986

[Excludes government employees, railroad employees, self-employed persons, etc. See "General Explanation" in source for definitions and statement on reliability of data. An establishment is a single physical location where business is conducted or where services or industrial operations are performed]

EMPLOYMENT SIZE-CLASS	Unit	All Industries ¹	Agricultural services ²	Min- ing	Contract con- struction	Manufac- turing	Transpor- ta- tion ³	Whole- sale trade	Retail trade	Fi- nance and insurance ⁴	Serv- ices
Establishments, total.....	1,000	5,807	68	35	492	355	210	440	1,441	504	1,811
Under 20 employees.....	1,000	5,082	65	28	445	230	170	374	1,237	450	1,639
20 to 99 employees.....	1,000	605	3	6	42	88	32	59	184	45	138
100 to 499 employees.....	1,000	107	(2)	1	5	32	7	6	19	7	29
500 to 999 employees.....	1,000	8	(2)	(2)	(2)	4	1	(2)	1	1	3
1,000 or more employees.....	1,000	5	(2)	(2)	(2)	2	(2)	(2)	(2)	(2)	2
Employees, total.....	1,000	83,380	412	847	4,659	18,142	4,884	5,725	17,550	6,371	22,878
Under 20 employees.....	1,000	22,296	235	141	1,877	1,420	823	2,048	6,148	1,836	6,746
20 to 99 employees.....	1,000	24,811	110	240	1,607	3,900	1,312	2,231	7,321	1,807	5,621
100 to 499 employees.....	1,000	20,280	52	278	787	6,525	1,352	1,108	3,230	1,418	5,499
500 to 999 employees.....	1,000	5,780	10	103	142	2,409	418	180	346	427	1,735
1,000 or more employees.....	1,000	10,734	4	85	236	4,888	980	147	235	882	3,277
Annual payroll ¹	Bil. dol.	1,809	5.8	24.5	104.5	467.8	127.7	138.2	193.0	151.0	381.4
Under 20 employees.....	Bil. dol.	375	3.4	3.3	37.0	27.8	16.3	45.5	68.0	38.5	121.8
20 to 99 employees.....	Bil. dol.	414	1.5	6.1	37.3	79.4	30.1	53.0	76.4	42.0	88.8
100 to 499 employees.....	Bil. dol.	381	.7	8.7	20.3	142.3	35.8	29.3	38.4	34.5	80.7
500 to 999 employees.....	Bil. dol.	132	(2)	3.6	3.7	59.9	13.0	5.8	5.6	11.0	29.5
1,000 or more employees.....	Bil. dol.	288	(2)	2.8	6.2	158.5	32.4	4.7	5.0	25.3	62.6

Z. Less than 500 establishments or \$500 million. ¹ Includes nonclassifiable establishments not shown separately.

² Includes forestry and fisheries. ³ Includes other public utilities. ⁴ Includes real estate.

Source: U.S. Bureau of the Census, *County Business Patterns*, annual.

No. 860. EMPLOYEES AND PAYROLL, BY EMPLOYMENT-SIZE CLASS: 1975 TO 1986

[See headnote, table 859]

EMPLOYMENT-SIZE CLASS	Unit	1975	1979	1980	1981	1982	1983	1984	1985	1986
Employees, total ¹	1,000	60,519	75,411	74,844	74,848	74,287	72,974	78,021	81,111	83,380
Under 20 employees.....	1,000	16,393	19,406	19,423	19,515	19,898	20,136	21,171	21,810	22,296
20 to 99 employees.....	1,000	16,272	20,992	21,168	21,231	21,143	20,806	22,449	23,539	24,311
100 to 499 employees.....	1,000	13,713	17,527	17,840	17,977	17,444	16,794	18,348	19,410	20,260
500 to 999 employees.....	1,000	4,872	5,780	5,689	5,497	5,436	5,186	5,614	5,716	5,780
1,000 or more employees.....	1,000	9,315	10,976	10,716	10,630	10,376	10,050	10,413	10,645	10,734
Annual payroll ¹	Bil. dol.	596	952	1,035	1,076	1,198	1,269	1,339	1,514	1,609
Under 20 employees.....	Bil. dol.	138	210	231	254	272	298	326	352	375
20 to 99 employees.....	Bil. dol.	147	239	261	288	303	319	358	388	414
100 to 499 employees.....	Bil. dol.	135	224	249	279	286	297	334	362	391
500 to 999 employees.....	Bil. dol.	63	84	91	99	104	107	120	126	132
1,000 or more employees.....	Bil. dol.	123	196	208	229	234	248	269	286	298

¹ Prior to 1986, totals for employees and annual payroll have been revised. Detail may not add to totals because revisions for size class are not available.

Source: U.S. Bureau of the Census, *County Business Patterns*, annual.

NO. 861. SOURCES OF JOB GROWTH, BY STATE: 1980-1986

(In thousands, except percent change. Excludes government employment. Covers approximately 93 percent of full-time business activity, generally firms with at least one paid employee, with a Dun and Bradstreet credit rating, or using insurance markets. Based on the Small Business Data Base, USELM file, version 8, 1987, a longitudinally weighted 50 percent sample of SBA's universe U.S. Establishment and Enterprise Microdata (USEEM) files. Minus (-) sign indicates decrease)

DIVISION AND STATE	All jobs, 1986	CHANGE, 1980-1986		JOB CHANGE DUE TO ESTABLISHMENT—			
		Number	Per- cent	Births	Expan- sions	Deaths	Contra- ctions
U.S.	91,247.7	10,470.0	12.96	31,846.5	12,684.5	-25,205.2	-8,855.8
New England							
Maine	5,758.8	776.4	15.58	1,812.8	901.7	-1,460.7	-477.4
New Hampshire	419.2	32.0	8.26	114.6	70.8	-118.7	-34.7
Vermont	416.5	84.8	25.55	147.6	71.0	-98.2	-35.7
Massachusetts	180.4	25.2	16.27	59.0	26.4	-45.5	-14.7
Rhode Island	2,745.7	354.4	14.82	847.7	451.1	-709.8	-234.6
Connecticut	404.1	34.9	9.46	115.7	64.6	-113.5	-31.9
	1,592.9	245.0	18.18	528.1	217.7	-374.9	-125.9
Middle Atlantic	14,417.6	1,158.5	8.74	4,575.2	2,035.8	-4,056.1	-1,396.4
New York	6,872.2	622.0	9.95	2,134.4	1,003.2	-1,903.2	-612.3
New Jersey	3,225.3	453.3	16.36	1,151.1	451.3	-906.1	-243.0
Pennsylvania	4,320.1	83.1	1.98	1,289.7	581.2	-1,246.7	-541.0
East North Central	16,184.9	248.6	1.56	4,948.3	2,028.3	-4,580.4	-2,147.6
Ohio	4,267.7	106.1	2.55	1,343.4	513.0	-1,202.2	-548.1
Indiana	2,064.7	-21.7	-1.04	660.8	247.9	-621.7	-305.7
Illinois	4,855.2	85.2	1.79	1,510.2	614.8	-1,342.6	-697.2
Michigan	3,134.3	16.1	.52	916.5	415.2	-933.7	-381.9
Wisconsin	1,663.0	62.8	3.49	517.5	237.4	-480.3	-211.7
West North Central	6,658.6	632.3	10.48	2,131.6	887.4	-1,697.5	-689.1
Minnesota	1,728.5	256.4	18.14	551.5	286.7	-389.7	-173.1
Iowa	958.6	-1.0	-1.10	294.4	119.9	-277.8	-137.4
Missouri	1,986.5	143.4	7.78	603.5	257.9	-531.2	-186.8
North Dakota	200.6	21.5	12.02	59.2	27.2	-47.7	-17.1
South Dakota	217.7	29.8	15.85	77.7	22.2	-47.0	-23.2
Nebraska	651.8	102.1	18.58	250.5	65.3	-155.8	-57.8
Kansas	915.0	71.0	8.41	294.8	108.1	-238.4	-93.6
South Atlantic	15,044.8	2,717.4	22.04	5,631.4	2,168.1	-3,866.4	-1,213.7
Delaware	249.5	72.2	40.75	104.4	38.0	-49.5	-20.7
Maryland	1,623.3	284.0	17.21	594.9	256.3	-434.0	-133.1
District of Columbia	530.0	90.1	20.50	200.7	69.9	-119.8	-60.8
Virginia	2,079.9	384.1	22.65	771.4	292.3	-510.3	-169.3
West Virginia	500.6	-31.3	-5.88	135.7	59.6	-152.2	-74.4
North Carolina	2,307.2	412.3	21.78	750.5	349.9	-513.5	-174.6
South Carolina	1,123.1	135.7	13.74	387.8	135.0	-283.4	-103.3
Georgia	2,461.5	445.3	22.09	906.3	349.4	-638.8	-171.6
Florida	4,169.8	824.9	28.50	1,780.1	617.7	-1,167.1	-305.8
East South Central	5,037.7	487.0	10.22	1,726.7	677.7	-1,473.6	-463.8
Kentucky	1,146.5	10.7	.94	359.5	157.7	-376.7	-127.6
Tennessee	1,865.2	254.1	15.77	645.7	261.1	-501.3	-151.4
Alabama	1,241.2	98.4	8.61	443.4	170.7	-390.4	-125.2
Mississippi	784.8	103.8	15.24	278.1	88.2	-203.2	-59.3
West South Central	10,044.5	1,422.4	16.50	3,988.0	1,355.3	-2,904.6	-996.3
Arkansas	782.4	61.9	8.60	242.4	102.6	-208.1	-74.9
Louisiana	1,542.1	183.8	11.89	561.5	228.2	-464.7	-161.2
Oklahoma	1,088.6	55.7	5.40	399.4	132.3	-354.7	-121.3
Texas	6,631.4	1,140.9	20.78	2,764.7	892.2	-1,877.2	-638.8
Mountain	4,615.3	831.7	21.98	1,902.1	652.9	-1,357.1	-366.2
Montana	241.5	5.2	2.20	81.5	31.9	-86.1	-22.2
Idaho	303.8	30.3	11.08	112.0	33.7	-89.0	-26.3
Wyoming	164.7	-13.8	-7.73	64.1	17.4	-71.4	-23.9
Colorado	1,437.2	304.4	26.87	575.4	211.4	-376.8	-105.5
New Mexico	424.8	28.6	7.21	158.8	54.3	-146.8	-37.7
Arizona	1,033.1	304.4	41.78	470.4	154.9	-253.7	-67.2
Utah	605.3	105.9	21.20	275.6	84.8	-195.4	-58.1
Nevada	404.9	66.7	19.71	164.2	64.5	-136.8	-25.3
Pacific	13,485.6	2,215.8	19.66	5,150.3	1,977.5	-3,808.6	-1,105.3
Washington	1,463.7	173.8	13.47	557.7	180.0	-413.3	-158.7
Oregon	1,000.2	81.7	8.90	356.8	128.8	-287.3	-116.6
California	10,442.5	1,864.0	21.73	4,020.6	1,577.5	-2,957.4	-776.8
Alaska	167.1	60.7	57.07	77.4	31.8	-37.7	-10.8
Hawaii	412.2	35.6	9.46	137.8	51.3	-110.9	-42.5

Source: U.S. Small Business Administration, Office of Advocacy, unpublished data.

No. 862. CONSUMER AND FARMER COOPERATIVES, BY TYPE OF ASSOCIATION: 1981 TO 1986

[Members in thousands; business in millions of dollars. Business refers to loans outstanding]

TYPE OF ASSOCIATION	1981			1985			1986		
	Associations	Members	Business	Associations	Members	Business	Associations	Members	Business
Credit unions ¹	20,697	45,069	50,394	15,045	45,265	74,409	14,693	48,408	86,139
Electric power cooperatives ²	869	9,028	7,440	868	10,032	11,032	862	10,251	11,408
Rural telephone cooperatives ³	254	962	391	250	1,047	607	250	1,062	639
Farmer cooperatives selling producer and consumer goods ⁴	5,009	(NA)	17,059	4,288	(NA)	16,641	4,151	(NA)	15,095

NA. Not available. ¹ Beginning 1985, covers federally insured credit unions. Source: National Credit Union Administration, *Annual Report of the National Credit Union Administration*. ² Source: U.S. Rural Electrification Administration, *Statistical Report—Rural Electric Borrowers*. ³ Source: U.S. Rural Electrification Administration, *Statistical Report—Rural Telephone Borrowers*. ⁴ Data for fiscal years ending June 30 or earlier in years shown.

Source: Except as noted, U.S. Dept. of Agriculture, Agricultural Cooperative Service, unpublished data.

No. 863. INDUSTRIAL AND COMMERCIAL STARTS AND FAILURES—NUMBER AND LIABILITIES: 1970 TO 1987

[Excludes Hawaii prior to 1975, Alaska prior to 1976. Commercial and industrial failures only through 1983, excluding failures of banks, railroads, real estate, insurance, holding, and financial companies, steamship lines, travel agencies, etc. Data for 1984–87 based on expanded coverage and new methodology and are therefore not generally comparable with earlier data. See also *Historical Statistics, Colonial Times to 1970*, series V 20–30]

YEAR	Total concerns in business ¹ (1,000)	Index of net business formations ² (1967 = 100)	New incorporations ² (1,000)	FAILURES ³			YEAR	Total concerns in business ¹ (1,000)	Index of net business formations ² (1967 = 100)	FAILURES ³			
				Number	Rate per 10,000 concerns	Current liabilities ⁴ (mil. dol.)				Number	Rate per 10,000 concerns	Current liabilities ⁴ (mil. dol.)	
1970.....	2,442	108.8	264	10,748	44	1,888	1983.....	2,851	117.5	600	31,334	110	16,073
1975.....	2,679	109.9	326	11,432	43	4,380	1984.....	4,885	121.3	635	52,078	29	26,269
1980.....	2,780	129.9	534	11,742	42	4,635	1985.....	4,990	120.9	662	57,078	115	36,937
1981.....	2,745	124.8	581	16,794	61	6,955	1987, prel.	5,119	120.4	703	61,616	120	44,724
1982.....	2,806	116.4	567	24,908	88	15,611		6,004	120.9	685	61,209	102	36,337

¹ Data through 1983 represent number of names listed in July issue of *Dun & Bradstreet Reference Book*. Data for 1984–87 represent the number of establishments listed in the Dun's Census of American Business. The base has been changed due to expanded business failure coverage. ² Source: U.S. Bureau of Economic Analysis, *Business Conditions Digest*, January, 1988 and June issues. ³ Includes concerns discontinued following assignment, voluntary or involuntary petition in bankruptcy, attachment, execution, foreclosure, etc.; voluntary withdrawals from business with known loss to creditors; also enterprises involved in court action, such as receivership and reorganization or arrangement which may or may not lead to discontinuance; and businesses making voluntary compromise with creditors out of court. ⁴ Liabilities exclude long-term publicly held obligations; offsetting assets not taken into account.

Source: Except as noted, Dun & Bradstreet Corporation, New York, NY, *The Failure Record Through 1987* and *Monthly Failure Report*.

No. 864. NEW BUSINESS INCORPORATIONS AND NUMBER OF FAILURES, BY STATE: 1986 AND 1987

[1987 preliminary. Business Incorporations in thousands. See headnote, table 863]

DIVISION AND STATE	NEW BUSINESS INCORPORATIONS		NUMBER OF FAILURES		DIVISION AND STATE	NEW BUSINESS INCORPORATIONS		NUMBER OF FAILURES		DIVISION AND STATE	NEW BUSINESS INCORPORATIONS		NUMBER OF FAILURES	
	1986	1987	1986	1987		1986	1987	1986	1987		1986	1987	1986	1987
U.S.	702.7	684.6	61,616	61,209	W.N.C.—Con.	11.2	10.3	1,633	1,566	W.S.C....	63.9	57.9	12,752	12,788
N.E.	41.9	42.0	1,109	1,033	MO....	.9	1.0	101	108	AR....	5.8	5.7	377	437
ME....	3.0	3.2	59	59	ND....	1.0	1.0	152	276	LA....	11.7	10.1	1,826	1,818
NH....	3.9	3.7	56	134	SD....	2.6	2.6	369	681	OK....	7.6	7.6	2,869	2,142
VT....	1.8	2.0	29	48	NE....	4.4	4.3	1,690	988	TX....	38.8	34.6	7,680	8,391
MA....	17.3	17.2	725	646	KS....	31.2	31.4	46	31	MT....	48.6	46.4	5,920	5,903
RI....	3.5	3.7	38	35	S.A....	182.7	186.1	6,290	6,895	MI....	1.6	1.4	327	
CT....	12.5	12.1	202	111	DE....	16.0	16.4	461	490	ID....	1.8	1.7	313	443
M.A.	130.2	129.6	3,997	4,024	MD....	2.3	2.3	67	64	WY....	1.0	.8	282	276
NY....	76.9	76.3	1,513	1,717	DC....	16.7	17.2	692	865	CO....	15.9	14.5	3,274	2,910
N.J....	33.1	31.9	911	764	VA....	2.6	2.8	228	235	N.M....	2.5	2.4	271	227
PA....	20.2	21.4	1,573	1,543	W.V....	12.7	12.3	592	585	AZ....	12.5	11.9	668	824
E.N.C....	65.4	63.6	9,671	9,600	NC....	6.2	6.3	264	278	UT....	3.9	3.8	566	611
OH....	18.4	18.4	2,082	1,924	SC....	17.6	18.1	617	1,230	N.V....	9.5	9.9	362	285
IN....	10.7	10.4	1,094	1,307	GA....	27.6	27.4	3,333	3,207	Pac....	89.0	80.4	13,603	12,467
I.L....	27.0	26.8	3,308	3,307	FL....	11.2	11.3	501	596	W.A....	9.9	9.4	1,787	1,295
M.I....	22.9	21.8	1,620	1,819	E.S.C....	27.0	26.3	3,016	3,195	OR....	7.3	6.9	1,002	713
W.I....	6.5	6.2	1,567	1,243	K.Y....	9.3	9.1	1,180	1,139	CA....	67.2	59.7	10,243	9,972
M.N....	9.7	9.4	639	685	T.N....	6.8	6.7	376	495	A.K....	1.7	1.5	288	312
I.A....	4.2	3.8	674	910	A.L....	3.1	3.8	501	596	H.I....	2.9	2.9	283	175

Source: Dun & Bradstreet Corporation, New York, NY, *New Business Incorporations* and *Business Failure Record*.

NO. 865. BUSINESS STARTS AND FAILURES—NUMBER AND RATE BY INDUSTRY: 1985 TO 1987

[Minus sign (-) indicates decrease]

SIC ¹ code	INDUSTRY	BUSINESS STARTS			BUSINESS FAILURES			Rate per 10,000 firms 1987		
		Number		Percent change, 1986- 1987	Number		Percent change, 1986- 1987			
		1985	1986		1985	1986				
A	Agriculture, forestry, fishing	3,558	3,818	3,736	-2.1	2,699	2,649	3,767	42.2	194
B	Mining	2,289	1,739	1,540	-11.4	796	921	622	-32.5	147
10	Metal mining	65	54	72	33.3	36	26	24	-7.7	177
11	Anthracite mining	7	11	13	18.2	5	4	3	-25.0	123
121	Bituminous coal and lignite	258	271	201	-25.8	161	135	100	-25.9	254
138	Oil and gas extraction	1,862	1,295	1,168	-9.7	585	731	466	-36.3	141
14	Nonmetallic minerals	97	108	85	-21.3	29	25	29	16.0	78
C	Construction	34,417	33,079	31,246	-5.5	7,005	7,109	6,735	-5.3	92
15	General building contractors	13,324	13,039	12,557	-3.7	2,759	2,634	2,435	-5.3	92
16	Construction, other than bldg	1,822	1,555	1,330	-14.5	419	449	396	-11.8	97
17	Special trade contractors	19,271	18,485	17,359	-6.1	3,827	4,026	3,844	-4.5	90
D	Manufacturing ²	21,054	20,309	19,236	-5.3	4,869	4,772	4,313	-9.6	96
20	Food and kindred products	904	982	969	.7	261	239	194	-18.0	88
22	Textile mill products	572	583	558	-4.3	110	72	75	4.2	79
23	Apparel, other textile products	1,674	1,470	1,413	-3.9	338	287	260	-9.4	94
24	Lumber and wood products	1,366	1,365	1,192	-12.7	415	392	375	-4.3	107
25	Furniture and fixtures	883	880	760	-13.6	236	244	204	-16.4	131
26	Paper and allied products	269	293	294	3.9	55	46	63	37.0	106
27	Printing and publishing	3,625	3,245	3,292	1.4	659	608	634	4.6	79
28	Chemicals and allied products	697	717	674	-6.0	172	129	123	-4.7	84
30	Rubber and misc. products	770	751	700	-6.8	157	145	149	2.8	103
31	Leather and leather products	155	145	138	-4.8	47	48	33	-91.3	93
32	Stone, clay, and glass products	615	612	617	.8	159	164	159	-3.0	91
33	Primary metal products	355	401	378	-5.7	122	133	113	-15.0	142
34	Fabricated metal products	1,711	1,554	1,449	-6.8	484	528	470	-11.0	113
35	Machinery, exc. electric	2,865	2,839	2,540	-10.5	721	739	638	-13.7	91
36	Electric and electronic equipment	1,528	1,415	1,280	-9.5	329	332	267	-19.6	115
37	Transportation equipment	803	709	676	-4.7	197	228	182	-19.5	136
38	Instruments and related products	781	821	750	-8.6	110	140	109	-22.1	75
39	Miscellaneous	1,343	1,445	1,447	.1	271	267	243	-8.0	77
E	Transportation, public utilities	8,672	8,496	8,060	-5.1	2,536	2,565	2,249	-12.3	110
40	Railroad transportation	13	32	34	6.3	9	7	6	-14.3	64
41	Local passenger transit ³	654	546	577	5.7	148	145	119	-17.9	82
42	Trucking and warehousing	3,954	3,598	3,358	-6.7	1,617	1,622	1,423	-12.3	142
44	Water transportation	378	440	374	-15.0	105	112	101	-9.8	109
45	Air transportation	458	418	394	-5.7	104	92	94	2.2	99
46	Pipelines, except natural gas	10	7	13	85.7	-	-	3	(NS)	130
47	Transportation services	1,950	2,123	1,952	-8.1	322	374	313	-16.3	89
48	Communications	929	967	896	-7.3	173	152	140	-7.9	79
49	Electric, gas, sanitary services	326	363	459	26.4	58	61	50	-18.0	31
F	Wholesale trade	28,707	26,749	24,136	-9.8	4,836	4,869	4,321	-11.3	82
G	Retail trade	72,578	72,509	65,381	-9.8	13,494	13,620	12,242	-10.1	81
H	Finance, insurance, real estate ²	15,710	17,146	16,160	-5.8	2,676	2,797	2,547	-8.9	54
60	Banking	524	474	407	-14.1	139	157	208	-32.5	103
62	Security, commodity brokers	1,103	1,176	1,149	-2.3	177	160	136	-15.0	83
63	Insurance agents, brokers, and services	1,304	1,327	1,535	15.7	259	333	293	-12.0	27
65	Real estate	10,050	11,165	10,459	-6.5	1,638	1,658	1,528	-7.8	60
I	Services ²	57,702	59,424	54,788	-10.8	16,649	20,967	23,864	13.8	128
70	Hotels and other lodgings	1,535	1,731	1,788	3.2	304	314	343	9.2	62
72	Personal services	6,807	7,165	6,146	-14.2	1,030	1,001	962	-3.9	40
73	Business services	22,733	24,582	23,701	-3.6	6,132	10,050	10,585	5.3	283
75	Auto repair, services, and garages	5,997	5,550	5,193	-6.4	1,335	1,464	1,193	-18.5	68
76,79	Motion pictures, amusement, and recreation	4,554	4,364	3,434	-21.3	654	768	694	-9.6	82
80	Health services	4,026	4,656	4,298	-7.7	577	701	701	-	23
81	Legal services	1,296	1,337	1,292	-3.4	191	181	172	-5.0	14
82	Educational services	674	636	567	-10.8	100	126	127	.8	17
83	Social services	851	928	783	-15.6	200	196	213	8.7	26
84	Museums, art galleries, gardens	42	49	54	10.2	5	4	2	-50.0	9
86	Membership organizations	989	1,281	1,193	-6.9	69	66	54	-18.2	5

— Represents zero. NS Not significant.
not shown separately.

¹ Standard Industrial Classification; see text, section 13.

² Includes industries

Source: The Dun and Bradstreet Corporation, New York, NY, *Business Starts Record* and *Business Failure Record*.

Bankruptcy Petitions—Small Business Administration Loans

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NO. 866. BANKRUPTCY PETITIONS FILED, BY TYPE AND CHAPTER: 1975 TO 1987

[For years ending June 30]

ITEM	1975	1979	1980 ¹	1981	1982	1983	1984	1985	1986	1987
Total	254,484	226,476	277,880	360,329	367,866	374,734	344,275	364,536	477,856	561,278
Business	30,130	29,500	36,449	47,415	56,423	69,818	62,170	66,651	76,281	88,278
Non-business	224,354	196,976	241,431	312,914	311,443	304,916	282,105	297,885	401,575	473,000
Voluntary	253,198	225,549	276,691	358,997	366,391	373,084	342,828	362,939	476,214	559,658
Involuntary	1,286	927	1,189	1,332	1,595	1,670	1,447	1,597	1,642	1,820
Chapter 7 ³	209,330	163,259	214,357	265,721	255,098	251,322	232,994	244,650	332,679	397,551
Chapter 9 ⁴	—	1	—	1	4	3	4	3	7	10
Chapter 11 ⁵	3,506	3,042	5,302	7,828	14,059	21,207	19,913	21,425	24,443	22,566
Chapter 13 ⁶	41,178	39,442	58,216	86,778	98,705	102,201	91,358	98,452	120,726	136,300
Section 304 ⁷	(X)	(X)	5	1	—	1	6	6	1	27

¹ Represents zero. ² Not applicable. ³ For the first three months of 1980 the judiciary operated under the Bankruptcy Act and for the last nine months under the new bankruptcy code established by the Bankruptcy Reform Act of 1978, includes only those petitions filed under the new bankruptcy code. ⁴ Includes five Section 304 cases filed under the Reform Act in 1980 and 1 in 1981 which are not included in the subcategories of voluntary/involuntary. ⁵ Chapter 7, liquidation of non-exempt assets of businesses or individuals. ⁶ Chapter 9, adjustment of debts of a municipality. ⁷ Chapter 11, individual or business reorganization. ⁸ Chapter 13, adjustment of debts of an individual with regular income. ⁹ 11 U.S.C., Section 304, cases ancillary to foreign proceedings.

NO. 867. BANKRUPTCY PETITIONS FILED AND PENDING: 1905 TO 1987

[In thousands. For fiscal years ending in year shown; see text, section 9. Covers all U.S. bankruptcy courts. Bankruptcy petitions "Filed" means the commencement of a proceeding through the presentation of a petition to the clerk of the bankruptcy court; "Pending" is a proceeding in which the administration has not been completed]

YEAR	Filed	Pend-ing									
1905	17	28	1935	68	65	1965	180	162	1983	375	537
1910	18	28	1940	53	55	1970	194	191	1984	344	578
1915	28	44	1945	13	21	1975	254	202	1985	365	609
1920	14	30	1950	33	38	1980	278	346	1986	478	729
1925	46	60	1955	59	56	1981	360	362	1987	561	809
1930	63	61	1960	110	95	1982	368	461			

Source of tables 866 and 867: Administrative Office of the U.S. Courts, *Annual Report of the Director*.

NO. 868. SMALL BUSINESS ADMINISTRATION LOANS TO ALL SMALL BUSINESSES: 1970 TO 1987

[For fiscal year ending in year shown; see text, section 9. A small business must be independently owned and operated, must not be dominant in its particular industry, and must meet standards set by the Small Business Administration as to its annual receipts or number of employees. Loans include both direct and guaranteed loans to small business establishments. Does not include Disaster Assistance Loans]

LOANS APPROVED	Unit	1970-1987	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Loans, all businesses	1,000...	24.3	31.7	30.2	31.7	28.7	15.4	19.2	21.3	19.3	16.8	17.1
Loans, minority-owned businesses	1,000...	5.3	6.1	5.5	6.0	5.2	2.7	2.7	3.1	2.8	2.0	2.1
Percent of business loans	Percent...	22	19	18	19	18	16	14	15	15	12	12
Value of total loans ¹	Mil. dol...	2,582	3,314	3,407	3,858	3,668	2,038	3,007	3,450	3,217	3,013	3,292
Value of loans to minority-operated businesses ²	Mil. dol...	314	402	428	470	454	238	295	383	324	265	299

¹ Includes both SBA and bank portions of loans. ² SBA direct loans and guaranteed portion of bank loans only.

Source: U.S. Small Business Administration, unpublished data.

NO. 869. SMALL BUSINESS BIRTH, DEATH, AND NET GROWTH RATES: 1980 TO 1986

[Represents any concern which is independently owned and operated and has fewer than 500 employees. Minus sign (−) indicates decrease]

ITEM	Birth rate ¹	Death rate ²	Net growth ³	ITEM	Birth rate ¹	Death rate ²	Net growth ³
All Industries: 1980-1982.....	9.5	9.1	.4	Wholesale trade: 1980-1982.....	9.1	7.5	1.6
1982-1984.....	10.2	8.9	1.3	1982-1984.....	9.9	7.5	2.4
1984-1986.....	9.0	9.9	−.9	1984-1986.....	8.2	8.6	−.4
Construction: 1980-1982.....	8.9	9.6	−.7	Retail trade: 1980-1982.....	8.5	9.6	−1.1
1982-1984.....	10.8	10.5	.3	1982-1984.....	8.9	9.5	−.6
1984-1986.....	9.9	10.8	−.9	1984-1986.....	8.1	10.4	−2.3
Manufacturing: 1980-1982.....	8.1	7.9	.8	Services: 1980-1982.....	11.4	9.3	2.1
1982-1984.....	8.8	7.1	1.7	1982-1984.....	11.8	8.7	3.1
1984-1986.....	7.5	8.0	−.5	1984-1986.....	10.2	10.0	−.2

¹ Business births represent the number of establishments formed during a specified period relative to the number in the initial year. ² Business deaths represent the disappearance of an establishment or enterprise from the SBDB for financial or nonfinancial reasons relative to the initial year. ³ Net growth rate is the birth rate less the death rate.

Source: U.S. Small Business Administration, Office of Advocacy USELM file, version 9, December 1987. The USELM is a longitudinally weighted 50 percent sample of SBA's universe U.S. Establishment and Enterprise Microdata (USEEM) file.

Business Enterprise

NO. 870. WOMEN-OWNED AND MINORITY-OWNED FIRMS—NUMBER AND RECEIPTS FOR TEN LARGEST SMSA'S AND INDUSTRIES BY TYPE OF OWNERSHIP: 1982

(Represents standard metropolitan statistical areas (SMSA's) established by the Office of Management and Budget, as of January 1, 1982. See Appendix II for newly defined metropolitan statistical areas and definition. The number enclosed within parentheses is the 2 digit Standard Industrial Classification for that industry.)

SMSA AND INDUSTRY GROUP		WOMEN-OWNED		BLACK-OWNED		HISPANIC-OWNED		SMSA AND INDUSTRY GROUP		ASIAN- AND OTHER-OWNED	
		SMSA AND INDUSTRY GROUP						SMSA AND INDUSTRY GROUP			
		Re-ceipts (mil. dol.)	Num-ber of firms			Re-ceipts (mil. dol.)	Num-ber of firms			Re-ceipts (mil. dol.)	Num-ber of firms
Los Angeles-Long Beach, CA.....	3,789	23,520	775	Los Angeles-Long Beach, CA.....	29,082	1,717	1,717	Los Angeles-Long Beach, CA.....	38,331	2,956	2,956
New York, NY-NJ.....	5,321	20,242	725	New York, NY-NJ.....	24,888	2,226	Honolulu, HI.....	21,676	2,153		
Chicago, IL.....	2,958	18,805	556	Miami, FL.....	12,292	882	San Francisco-Oakland, CA.....	19,536	1,456		
San Francisco-Oakland, CA.....	64,413	19,401	934	New York, NY-NJ.....	10,341	555	New York, NY-NJ.....	15,895	916		
Dallas-Fort Worth, TX.....	56,448	19,986	934	New Antonio, TX.....	9,276	441	Chicago, IL.....	8,553	491		
Washington, DC-MD-VA.....	51,015	1,395	390	San Francisco-Oakland, CA.....	7,649	418	Anaheim-Santa Ana-Garden	8,006	441		
Houston, TX.....	48,694	1,710	389	El Paso, TX.....	5,894	402	Grove, CA.....	7,310	393		
Philadelphia, PA-NJ.....	42,650	1,684	354	McAllan-Pharr-Edinburg, TX.....	5,766	322	San Jose, CA.....	6,588	397		
Detroit, MI.....	40,176	1,300	7,825	Anaheim-Santa Ana-Garden	210	10	Houston, TX.....	5,879	289		
Denver-Boulder, CO.....	37,916	1,053	7,077	Riverside-San Bernardino-Ontario, CA.....	5,317	306	Washington, DC-MD-VA.....	4,482	216		
Eating and drinking places (58)....	6,811	6,884	Automotive dealers and service stations (55).....	3,448	1,307	INDUSTRY	272				
Food stores (54).....	37,685	6,047	Miscellaneous retail (59).....	53,981	993	Automotive dealers and service stations (55).....	3,746	1,309	Food stores (54).....	10,281	2,504
Personal services (72).....	419,113	5,500	Food stores (54).....	9,187	883	Eating and drinking places (58).....	2,279	1,286	Eating and drinking places (58).....	17,028	1,922
Wholesale trade—nondurable goods (51).....	22,231	5,287	Eating and drinking places (58).....	11,623	675	Wholesale trade—nondurable goods (51).....	7,692	1,095	Miscellaneous retail (59).....	36,577	1,467
Automotive dealers and service stations (55).....	14,353	4,754	Health services (80).....	17,195	595	Food stores (54).....	10,791	1,076	Health services (80).....	20,063	1,446
Real estate (65).....	225,551	4,723	Special trade contractors (17).....	18,389	578	Health services (80).....	8,401	579	Hotels and other lodging places (70).....		
Health services (80).....	128,389	3,989	Personal services (72).....	40,394	561	Wholesale trade—durable goods (50).....	1,343	531	Wholesale trade—nondurable goods (51).....		
Wholesale trade—durable goods (50).....	12,021	3,893	Wholesale trade—nondurable goods (51).....	2,441	550	Trucking and warehousing (42).....	9,201	419	Persons services (72).....		
Special trade contractors (17).....	47,219	2,497	Trucking and warehousing (42).....	13,029	530	Personal services (72).....	22,382	410	Special trade contractors (17).....	9,915	490
Apparel and accessory stores (56).....	29,130	2,446	Wholesale trade—durable goods (50).....	1,210	309	Auto repair, services, and garages (75).....	6,873	363	Wholesale trade—durable goods (50).....	1,574	365

Source: Bureau of the Census, 1982 Survey of Minority-Owned Business Enterprises, series MB82-1, MB82-2, MB82-3, and 1982 Survey of Women-Owned Businesses, series WEBB-1, WEBB-2, and WEBB-3.

Small and Minority-Owned Businesses

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NO. 871. SMALL AND MINORITY-OWNED BUSINESSES—FEDERAL CONTRACT AWARDS, BY STATE: 1986 AND 1987

[In millions of dollars, except percent. Excludes Guam and Puerto Rico. Represents contract awards of \$10,000 or more. Minus sign (-) indicates decrease.]

REGION, DIVISION, AND STATE	TOTAL CONTRACTS AWARDED			SMALL BUSINESS SHARE			MINORITY-OWNED SHARE			Percent change 1986- 1987	
	1986	1987	Percent change 1986- 1987	1987		Percent change 1986- 1987	1986	1987			
				1986	Amount		1986	Amount	Percent of total		
U.S.	173,326	170,024	-1.9	26,668	27,081	15.9	-5.5	4,055	4,609	2.7	13.7
Region:											
Northeast	36,950	36,411	-1.5	4,781	4,484	12.3	-6.2	423	401	1.1	-5.2
Midwest	29,103	26,812	-7.8	4,896	3,924	14.6	-19.7	552	581	2.2	5.3
South	58,076	55,327	-4.4	12,618	12,002	21.3	-4.9	2,027	2,363	4.2	16.6
West	51,199	50,475	-1.4	6,382	6,671	13.2	4.5	1,054	1,264	2.5	19.9
New England.....	16,805	16,716	-5	1,496	1,557	9.3	4.1	84	135	.8	60.7
Maine	615	871	41.6	87	81	9.3	-6.9	6	4	.5	-33.3
New Hampshire.....	494	495	.2	63	92	18.6	46.0	3	3	.6	-
Vermont	142	136	-4.2	14	20	14.7	42.9	-12	(x)	(x)	
Massachusetts	9,278	9,276	-2	740	779	8.4	5.3	71	90	1.0	26.8
Rhode Island.....	444	519	16.9	185	183	81.4	-1.2	3	7	1.3	133.3
Connecticut.....	5,832	5,418	-7.1	426	421	7.8	-1.2	12	31	.6	156.3
Middle Atlantic.....	20,145	19,695	-2.2	3,286	2,927	14.9	-10.9	339	266	1.4	-21.5
New York.....	11,045	10,895	-1.4	1,327	1,227	11.3	-8.2	151	80	.7	-47.0
New Jersey.....	3,827	3,833	.2	880	886	20.5	-11.7	91	113	2.9	24.2
Pennsylvania.....	5,273	4,987	-5.5	1,059	914	18.4	-13.7	87	73	1.5	-24.7
East North Central	16,253	14,345	-11.7	3,438	2,656	18.5	-22.7	367	381	2.7	3.8
Ohio	6,453	5,698	-11.7	880	798	14.0	-9.3	154	158	2.8	2.6
Indiana	2,607	2,318	-11.1	258	246	10.6	-4.7	28	26	1.1	-7.1
Illinois	2,673	2,924	9.4	679	747	25.5	10.0	146	164	5.6	12.3
Michigan	2,846	2,147	-24.6	654	553	25.8	-15.4	34	23	1.1	-32.4
Wisconsin.....	1,673	1,255	-24.8	987	311	24.7	-6.7	5	10	.8	100.0
West North Central	12,850	12,467	-3.0	1,448	1,268	10.2	-12.4	185	200	1.6	8.1
Minnesota	2,814	2,644	-1.1	223	178	6.7	-20.2	5	10	.4	100.0
Iowa	776	766	-1.3	105	78	10.2	-25.7	13	17	2.2	30.8
Missouri	8,444	8,819	5.8	409	430	6.3	5.1	40	64	.9	60.0
North Dakota.....	286	227	-20.6	168	158	98.6	-4.8	84	53	23.3	-36.9
South Dakota.....	191	198	-27.7	75	65	47.1	-13.3	9	16	11.6	77.8
Nebraska.....	423	387	-8.5	186	189	43.7	-9.1	8	13	3.4	62.5
Kansas	2,117	1,486	-29.8	283	189	12.7	-33.2	25	27	1.8	8.0
South Atlantic.....	30,260	33,314	10.1	6,680	7,083	21.3	6.0	1,308	1,499	4.5	14.6
Delaware	237	223	-5.9	35	43	19.3	22.9	3	2	.9	-33.3
Maryland	6,323	6,794	7.4	1,148	1,253	18.4	9.3	324	387	5.7	19.4
District of Columbia	2,341	2,420	3.4	617	749	31.0	21.4	256	313	12.9	22.3
Virginia	6,790	8,397	38.4	2,096	2,259	24.0	7.8	448	548	5.8	22.3
West Virginia.....	278	267	-4.0	130	105	39.3	-19.2	14	14	5.2	-
North Carolina	1,433	1,586	10.7	490	566	35.7	15.5	38	40	2.5	5.3
South Carolina	1,730	1,839	6.3	348	363	19.7	4.3	54	48	2.6	-11.1
Georgia	4,054	3,825	-5.6	619	483	12.8	-22.0	74	29	.8	-60.8
Florida	7,074	6,963	-1.6	1,198	1,262	18.1	5.3	96	117	1.7	21.9
East South Central	9,243	8,758	-5.2	3,034	2,900	26.3	-24.2	253	412	4.7	62.8
Kentucky	2,628	929	-64.6	1,480	410	44.1	-72.3	36	154	16.6	327.8
Tennessee	2,608	3,609	38.4	429	917	25.4	113.8	37	36	1.0	-2.7
Alabama	2,215	2,486	12.2	809	718	26.9	-11.2	151	198	7.9	29.8
Mississippi.....	1,792	1,733	-3.3	316	255	14.7	-19.3	29	27	1.6	-6.9
West South Central	18,573	14,255	-14.0	2,905	2,619	18.4	-9.8	467	452	3.2	-3.2
Arkansas	981	838	-14.6	181	266	31.7	39.3	18	15	1.8	-16.7
Louisiana	2,146	2,309	7.6	440	549	29.8	24.8	54	51	2.2	-5.6
Oklahoma	913	755	-17.3	460	368	47.4	-22.2	153	99	13.1	-35.3
Texas	12,532	10,353	-17.4	1,814	1,446	14.0	-20.3	242	286	2.8	18.2
Mountain.....	11,692	13,837	18.3	1,535	1,798	13.0	17.1	302	470	3.4	55.6
Montana	132	170	28.8	101	135	79.4	33.7	9	38	22.4	322.2
Idaho	566	583	-5	82	80	14.2	-2.4	13	14	2.5	7.7
Wyoming	172	122	-29.1	74	93	76.2	25.7	2	5	4.1	150.0
Colorado	2,877	3,696	28.5	332	413	11.2	24.4	66	87	2.4	31.8
New Mexico	2,845	3,018	6.1	236	316	10.5	33.9	53	164	5.4	209.4
Arizona	2,994	3,726	24.4	308	383	10.3	24.4	65	89	2.4	36.9
Utah	1,242	1,603	29.1	300	255	15.9	-15.0	67	50	3.1	-25.4
Nevada	865	839	8.6	103	123	13.1	19.4	28	23	2.4	-17.9
Pacific.....	39,507	36,638	-7.3	4,847	4,872	13.3	.5	752	794	2.2	5.6
Washington	3,717	4,479	20.5	487	502	11.2	3.1	72	74	1.7	2.8
Oregon	500	614	2.8	207	203	39.5	-1.9	19	12	2.3	-36.8
California	33,977	30,388	-10.6	3,608	3,584	11.8	-7	514	528	1.7	2.7
Alaska	708	737	4.7	298	318	43.1	6.7	30	43	5.8	43.3
Hawaii	604	620	-13.9	247	265	51.0	7.3	117	137	26.3	17.1

- Represents zero. X Not applicable.

Source: U.S. Small Business Administration, *The State of Small Business: A Report of the President*, annual. Data from Federal Procurement Data Center, "Special Report T1726," June 1, 1988.

Business Enterprise

No. 872. MERGERS AND ACQUISITIONS—HISTORICAL SUMMARY: 1965 TO 1987

ITEM	Unit	1965	1970	1980	1981	1982	1983	1984	1985	1986	1987
Mergers and acquisitions, net ¹	Number..	2,125	5,152	1,889	2,395	2,346	2,533	2,543	3,001	3,336	2,032
Dollar value paid	Bil. dol. ..	(NA)	16.4	44.3	82.6	53.8	73.1	122.2	179.8	173.1	163.7
\$100 million-plus deals	Number..	10	94	113	116	138	200	270	346	301	
Method of payment:											
Cash	Percent..	67	29	47	42	38	32	43	51	42	41
Stock	Percent..	30	52	31	34	29	35	26	23	32	34
Combination	Percent..	3	16	21	23	31	33	30	26	26	24
Debt	Percent..	(2)	3	1	1	2	-	1	-	-	1
Divestitures.....	Number..	181	1,401	666	830	875	932	900	1,218	1,259	807
Acquisitions of publicly traded sellers	Number..	(NA)	(NA)	173	168	180	190	211	336	386	286
Acquisitions of privately held sellers	Number..	(NA)	(NA)	988	1,330	1,222	1,316	1,351	1,358	1,598	855
Foreign sellers, total	Number..	(NA)	(NA)	102	101	121	146	147	175	180	142
Foreign buyers, total	Number..	(NA)	(NA)	187	234	154	125	151	197	264	220
Average P/E paid	Percent..	19.4	23.1	15.2	15.6	13.9	16.7	17.2	18.0	22.2	23.3
Average premium paid over market	Percent..	(NA)	33.4	49.9	48.0	47.4	37.7	37.9	37.1	38.2	38.3
Cancelled transactions	Number..	527	178	163	189	182	218	236	199	155	

¹ Represents zero. NA Not available.

² Represents announcement.

³ A separate count for debt payments began in 1970.

No. 873. MERGER AND ACQUISITION TRANSACTIONS—NUMBER AND VALUE, BY INDUSTRY: 1983 TO 1987

[Represents transactions for which valuation data are publicly reported]

INDUSTRY CLASSIFICATION OF SELLER	NUMBER OF MERGERS					NOMINAL VALUE (mil. dol.)				
	1983	1984	1985	1986	1987	1983	1984	1985	1986	1987
Total	2,533	2,543	3,001	3,336	2,032	73,081	122,224	179,768	173,137	163,686
Oil and gas	111	102	86	58	30	12,076	42,982	23,160	3,247	15,442
Banking and finance	331	251	381	415	262	12,628	5,846	14,037	19,442	16,209
Insurance	67	66	67	94	38	2,966	3,006	2,694	5,413	2,484
Mining and minerals	18	12	16	14	8	2,946	347	356	148	676
Food processing	74	58	82	101	78	1,164	7,095	11,888	4,707	3,316
Conglomerate	13	18	14	20	6	2,745	6,983	16,302	15,307	6,839
Transportation	36	36	48	58	34	5,255	1,252	2,877	6,829	4,956
Broadcasting	60	83	93	123	64	3,747	1,918	15,013	8,107	6,729
Retail	90	130	136	147	150	1,489	6,673	10,090	13,683	17,039
Brokerage and investment firms	63	86	49	47	32	1,455	1,460	579	1,710	3,492
Other	1,670	1,701	2,029	2,259	1,330	25,609	44,662	82,892	94,544	84,504

Source of tables 872 and 873: W.T. Grimm & Co., Chicago, IL, *Mergersstat Review*, 1987. (Copyright.)

No. 874. PATENTS AND TRADEMARKS: 1961 TO 1987

[In thousands. Calendar year data. Covers patents issued to citizens of the United States and residents of foreign countries. For information on copyrights, see table 817. See also *Historical Statistics, Colonial Times to 1970*, series W 96-108.]

ITEM	1961-1970	1971-1980	1980	1981	1982	1983	1984	1985	1986	1987
Patent applications filed	967.8	1,091.5	113.0	114.5	118.4	112.4	120.6	127.1	133.0	139.8
Inventions	912.3	1,019.4	104.3	106.5	109.6	103.7	111.3	117.0	122.4	127.9
Designs	51.6	65.8	7.6	7.4	8.2	8.1	8.7	9.6	9.9	11.2
Botanical plants	1.2	1.7	.2	.2	.2	.3	.3	.2	.3	.4
Reissues	2.7	4.6	.6	.5	.4	.3	.3	.3	.3	.4
Patents issued	618.3	731.0	66.2	71.0	63.3	62.0	72.7	77.2	76.9	89.4
Inventions	585.1	687.8	61.8	65.8	57.9	56.9	67.2	71.7	70.9	83.0
Individuals	143.3	152.0	13.3	14.1	11.9	10.5	12.3	12.9	13.3	15.3
Corporations: U.S.	343.1	343.3	29.4	29.5	25.8	25.7	30.1	31.3	29.6	33.8
Foreign ¹	83.8	176.4	18.2	21.0	19.2	19.6	23.6	26.4	27.0	32.9
U.S. Government	14.9	16.1	1.0	1.1	1.0	1.0	1.2	1.1	1.0	1.0
Designs	30.2	38.1	3.9	.1	4.7	4.9	4.6	4.9	5.1	5.5
Botanical plants	1.0	1.6	.3	.4	.3	.4	.3	.3	.3	.2
Reissues	2.1	3.4	.3	.4	.3	.4	.3	.3	.3	.2
Published applications ² .....	.6	1.3	.2	.1	.2	.2	.2	.2	.2	.2
Foreign country residents	124.3	237.3	24.7	26.5	24.0	25.4	30.5	33.9	34.9	41.7
Certificates of trademarks issued	235.1	309.0	24.7	48.6	46.4	46.8	54.0	71.7	51.8	51.4
Trademarks	196.1	250.6	18.9	42.7	42.4	40.5	48.6	65.8	46.7	47.3
Trademark renewals	39.0	58.4	5.9	5.9	6.0	6.2	5.4	5.9	5.1	4.1

² Less than 50. ¹ Includes patents to foreign governments. ² Abstracts of technical disclosure of patent published at request of applicant or owner. The practice called "Defensive Publications" began Nov. 1968 and ended July 1986. The current practice, called "Statutory Invention Registrations," began May 1985. ³ Includes patent inventions and patents for designs, botanical plants and reissues. Beginning 1986, also includes published applications.

Source: U.S. Patent and Trademark Office. Fiscal-year figures are published in the *Commissioner of Patents and Trademarks Annual Report*.

Patents, by Industry and State

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NO. 875. PATENTS, BY INDUSTRY: 1970 TO 1987

[Includes all patents for inventions granted to residents of the United States, its territories, and foreign citizens. Number of patents by industry may not add to total since a patent may be recorded in more than one industry category]

SIC ¹ code	INDUSTRY	1970	1975	1980	1985	1986	1987
(X)	Total...	64,429	70,002	61,819	71,661	70,860	82,952
(X)	Durable goods:						
32	Stone, clay, glass and concrete products.....	2,118	2,335	2,105	2,382	2,300	2,553
33, 3462-3	Primary metals.....	793	1,032	764	783	822	794
34	Fabricated metal products ²	7,646	8,870	7,429	8,295	8,928	9,749
35	Machinery, except electrical.....	18,349	20,385	17,056	20,185	19,568	21,907
36, 3825	Electrical and electronic equipment, and supplies.....	14,333	13,103	11,612	15,295	15,341	19,995
37, 348	Transportation and other public utilities.....	4,100	5,210	4,047	4,966	4,924	6,047
38	Professional and scientific instruments ³	8,085	8,930	8,477	10,139	10,567	12,536
(X)	Nondurable goods:						
20	Food and kindred products.....	508	705	515	576	462	500
22	Textile mill products.....	717	715	636	800	780	821
28	Chemical and allied products.....	9,616	12,909	10,746	11,300	10,123	11,273
13, 29	Petroleum, oil and gas extraction.....	859	810	783	1,018	849	954
30	Rubber and miscellaneous plastics products.....	4,728	5,711	4,909	5,897	5,591	6,232
	All other SIC ¹ groups.....	6,260	7,216	6,319	8,684	7,180	8,131

X Not applicable. ¹ Standard Industrial Classification. ² Excludes SIC groups 3462, 3463, 348. ³ Excludes SIC group 3825.

Source: U.S. Patent and Trademark Office, *Patenting Trends in the United States, State Country Report, 1963-1987*.

NO. 876. PATENTS, BY STATE: 1987

[Includes only U.S. patents granted to residents of the United States and territories]

STATE	Total	Inven-tions	De-signs	Botan-ical plants	Re-issue	STATE	Total	Inven-tions	De-signs	Botan-ical plants	Re-issue
U.S.	47,711	43,518	3,902	131	160	MT.....	87	83	4	-	-
AL.....	303	265	37	-	1	NE.....	128	120	7	-	1
AK.....	22	20	2	-	-	NV.....	98	81	16	-	1
AZ.....	716	672	42	-	2	NH.....	249	229	19	-	1
AR.....	95	71	24	-	-	NJ.....	3,050	2,833	203	2	12
CA.....	7,083	6,350	637	69	27	NM.....	181	175	2	-	4
CO.....	713	640	70	1	2	NY.....	3,937	3,538	389	1	9
CT.....	1,508	1,396	109	-	3	NC.....	748	659	89	-	-
DE.....	358	344	13	-	1	ND.....	45	42	3	-	-
DC.....	51	43	8	-	-	OH.....	2,630	2,379	231	12	8
FL.....	1,538	1,366	160	6	6	OK.....	658	619	35	-	4
GA.....	553	491	59	-	3	OR.....	585	490	74	21	-
HI.....	46	40	6	-	-	PA.....	3,029	2,884	136	-	9
ID.....	80	85	5	-	-	RI.....	125	105	18	-	22
IL.....	2,887	2,604	269	-	14	SC.....	324	289	31	1	3
IN.....	1,054	960	91	1	2	SD.....	44	39	5	-	-
IO.....	389	357	31	-	1	TN.....	385	347	37	-	1
KS.....	243	206	36	-	1	TX.....	2,896	2,720	161	6	9
KY.....	278	255	21	-	2	UT.....	307	274	33	-	-
LA.....	432	408	23	-	1	VT.....	102	87	14	-	1
ME.....	99	84	13	-	2	VA.....	625	572	52	-	1
MD.....	784	705	57	-	2	WA.....	771	698	69	1	3
MA.....	1,926	1,783	123	5	5	WV.....	135	130	5	-	-
MI.....	2,364	2,211	147	-	6	WI.....	1,032	936	90	4	2
MN.....	1,257	1,144	107	-	6	WY.....	50	45	5	-	-
MS.....	92	77	15	-	-	PR.....	21	11	10	-	-
MO.....	606	545	56	1	2	VI.....	2	1	1	-	-

- Represents zero.

Source: U.S. Patent and Trademark Office, *Patenting Trends in the United States, State Country Report, 1963-1987*.

No. 877. GROSS STOCK OF FIXED PRIVATE CAPITAL, NONRESIDENTIAL AND RESIDENTIAL, BY INDUSTRY: 1980 TO 1987

[In billions of dollars. Estimates as of Dec. 31]

INDUSTRY	CURRENT DOLLARS				CONSTANT (1982) DOLLARS			
	1980	1985	1986	1987	1980	1985	1986	1987
Fixed private capital.....	8,942.6	12,105.0	12,692.9	13,511.6	9,813.2	11,254.4	11,601.6	11,945.4
Nonresidential.....	4,044.4	6,705.4	6,993.4	7,354.4	5,420.0	6,348.3	6,544.7	6,738.6
Agriculture, forestry and fisheries.....	319.2	383.6	378.7	377.5	357.4	343.7	333.7	325.0
Farms.....	295.2	350.1	344.3	342.1	330.6	312.8	302.4	293.2
Agr. serv., forestry, and fisheries.....	24.0	33.5	34.4	35.4	26.7	30.9	31.3	31.8
Mining.....	358.0	448.4	420.1	420.1	441.2	548.9	541.1	530.1
Metal mining.....	26.4	35.3	35.3	36.0	30.0	32.0	31.5	31.0
Coal mining.....	31.7	46.9	46.7	47.3	36.5	43.7	43.1	42.4
Oil and gas extraction.....	282.5	344.0	316.3	315.2	354.8	452.9	446.9	438.1
Nonmetallic minerals, exc. fuels.....	17.4	22.3	21.8	21.6	19.9	20.3	19.5	18.6
Construction.....	100.3	109.4	109.8	110.8	113.1	100.5	98.8	96.7
Manufacturing.....	1,108.1	1,497.2	1,549.6	1,609.3	1,236.4	1,393.5	1,415.7	1,435.4
Durable goods.....	604.9	821.7	852.6	866.1	674.1	773.3	789.9	805.0
Lumber and wood products.....	28.8	34.1	34.4	35.1	32.2	30.7	30.2	29.8
Furniture and fixtures.....	8.9	11.9	12.4	13.2	9.9	10.9	11.1	11.5
Stone, clay, glass products.....	47.4	55.6	55.9	56.3	52.7	52.5	52.0	51.5
Primary metal industries.....	141.8	178.2	177.2	179.6	159.1	162.3	159.9	157.8
Fabricated metal products.....	68.6	91.7	95.6	99.7	76.3	84.9	86.9	88.7
Machinery, exc. electrical.....	94.9	135.3	140.7	148.2	105.0	134.9	139.3	143.6
Elec. and elec. equipment.....	70.2	119.5	128.1	138.1	78.8	112.3	118.9	125.5
Motor vehicles and equipment.....	72.5	91.8	95.8	98.5	80.5	86.0	88.2	88.9
Other transp. equipment.....	40.3	60.0	64.4	68.9	44.9	55.8	59.1	61.8
Instruments, related products.....	19.9	30.9	32.8	35.1	22.0	28.3	30.7	32.3
Misc. mfg. industries.....	11.6	14.7	15.1	15.5	12.9	13.5	13.6	13.5
Nondurable goods.....	503.2	675.6	697.0	723.2	562.3	620.1	625.8	630.4
Food and kindred products.....	100.4	134.2	139.2	145.3	112.0	122.1	123.6	125.1
Tobacco manufacturers.....	5.2	9.5	10.2	11.0	5.9	8.8	9.3	9.7
Textile mill products.....	33.9	41.4	41.8	42.7	38.0	37.1	36.5	36.1
Apparel; other textile products.....	11.1	13.4	13.5	13.8	12.4	12.3	12.1	12.0
Paper and allied products.....	68.5	94.9	99.3	104.5	77.2	87.4	89.6	91.6
Printing and publishing.....	35.7	51.7	54.9	59.0	39.7	48.2	50.2	52.6
Chemicals, allied products.....	141.9	183.5	187.8	193.0	158.6	170.0	170.1	169.5
Petroleum and coal products.....	68.6	98.3	100.0	102.4	76.3	89.6	89.2	88.5
Rubber, misc. plastic products.....	35.2	45.4	47.0	48.3	39.2	41.8	42.3	42.4
Leather and leather products.....	2.7	3.2	3.2	3.3	3.0	3.0	2.9	2.9
Transportation and public utilities.....	1,464.5	1,947.5	2,023.6	2,107.0	1,821.9	1,795.5	1,836.5	1,871.5
Transportation.....	501.2	586.2	586.1	592.0	551.1	541.2	536.2	529.7
Railroad transportation.....	237.6	255.6	248.6	248.4	258.3	232.2	226.4	220.6
Local, interurban pass. transi.....	9.3	9.6	9.7	9.7	10.2	8.8	8.7	8.5
Trucking and warehousing.....	75.7	105.0	109.7	112.9	84.7	93.3	95.0	96.0
Water transportation.....	50.9	65.8	67.0	68.4	57.3	63.9	64.0	63.5
Transportation by air.....	60.4	74.5	74.6	75.4	69.1	71.6	70.7	69.7
Pipelines, exc. natural gas.....	34.8	39.1	40.1	40.7	36.8	36.9	36.8	36.8
Transportation services.....	32.4	36.6	36.4	36.4	34.9	34.5	34.5	34.6
Communication.....	346.4	552.9	592.4	630.4	392.2	498.0	520.5	540.3
Telephone and telegraph.....	327.2	522.1	559.6	595.3	370.3	470.6	491.9	510.6
Radio and TV broadcasting.....	19.2	30.8	32.9	35.1	21.8	27.4	28.7	29.7
Elec., gas, and sanitary services.....	616.8	808.4	845.0	884.7	678.6	756.3	779.8	801.5
Electric services.....	487.9	631.9	661.8	695.0	521.0	590.2	611.0	629.7
Gas services.....	132.2	154.8	160.1	165.0	140.5	145.7	146.9	148.5
Sanitary services.....	16.7	21.7	23.0	24.7	17.2	20.4	21.8	23.3
Wholesale trade.....	152.3	247.7	272.8	298.1	167.5	243.2	267.1	291.7
Retail trade.....	258.1	401.7	433.4	471.8	285.1	360.0	379.3	400.3
Finance, insurance, real estate.....	716.1	1,104.7	1,193.9	1,297.0	789.2	1,034.1	1,110.7	1,191.8
Banking.....	78.3	131.6	149.1	168.5	86.3	138.4	159.2	183.4
Credit agencies other than banks.....	59.9	93.7	102.6	110.7	65.5	95.5	105.2	114.4
Security, commodity brokers, and services.....	2.9	5.3	6.4	7.4	3.2	6.2	7.9	9.8
Insurance carriers.....	16.9	31.5	40.8	51.0	18.3	37.9	52.4	69.6
Ins. agents, brokers, and services.....	4.3	5.1	5.3	5.4	4.6	5.6	5.7	5.8
Real estate.....	546.4	823.3	872.6	934.4	603.3	734.3	759.7	783.6
Holding, other investment companies.....	7.3	14.2	17.0	19.7	7.9	16.3	20.6	25.1
Services.....	367.8	566.3	611.6	662.7	408.2	528.9	561.8	596.1
Hotels, other lodging places.....	63.2	102.1	111.2	122.0	69.8	90.9	96.7	102.4
Personal services.....	21.3	26.5	27.2	28.1	23.5	24.1	24.2	24.4
Business services.....	82.7	134.3	147.0	160.6	92.3	134.5	146.1	158.2
Auto repair; serv., garages.....	61.5	98.6	107.8	116.7	68.7	90.5	96.5	102.8
Misc. repair services.....	9.8	13.8	14.5	15.2	11.0	12.7	13.1	13.5
Motion pictures.....	8.7	11.1	11.7	12.3	9.3	10.8	11.3	11.7
Amusement, recreation services.....	30.1	41.1	43.1	45.3	33.6	37.8	38.8	40.0
Other services.....	90.4	138.8	149.2	162.4	100.0	127.5	135.0	143.1
Health services.....	49.6	85.8	93.2	102.9	55.1	78.4	83.7	89.6
Legal services.....	6.5	10.0	11.2	12.6	7.1	9.4	10.5	11.8
Educational services.....	2.3	2.6	2.7	2.9	2.5	3.0	3.3	3.7
Other.....	32.1	40.5	42.1	44.0	35.3	36.7	37.4	38.1
Residential.....	4,098.4	5,398.5	5,699.5	6,157.2	4,393.1	4,906.1	5,056.9	5,206.8
Farms.....	127.4	145.2	146.3	151.0	137.3	131.7	129.6	128.0
Real estate.....	3,971.0	5,253.3	5,553.2	6,006.2	4,255.8	4,774.4	4,927.2	5,078.9

¹ Consists of social services, membership organizations, and miscellaneous professional services.

Source: U.S. Bureau of Economic Analysis, *Fixed Reproducible Tangible Wealth in the United States, 1925-85*, and *Survey of Current Business*, January 1986, and August 1988.

Capital Expenditures—Gross Private Domestic Investment

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NO. 878. BUSINESS EXPENDITURES FOR NEW PLANT AND EQUIPMENT: 1970 TO 1988

[In billions of dollars. Based on sample and subject to sampling variability; see text, section 17. Represents expenditures for new facilities and for expansion or replacement of existing facilities that are chargeable to fixed asset accounts and for which depreciation or amortization accounts are ordinarily maintained. Excludes expenditures for land and mineral rights; maintenance and repair; used plant and equipment, including that purchased or acquired through mergers or acquisitions; assets located in foreign countries; residential structures; etc. They also differ from the nonresidential fixed investment data in type of detail, data sources, coverage, and timing. For further information, see the February 1985 Survey of Current Business.]

INDUSTRY	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988 ¹
CURRENT DOLLARS											
All industries ²	91.9	142.4	282.8	315.2	310.6	304.8	354.4	397.1	379.5	388.6	430.2
Manufacturing	37.0	53.7	112.3	126.5	120.7	116.2	138.8	153.5	142.7	145.5	163.0
Durable goods ³	19.8	25.4	55.4	59.8	55.4	53.1	66.2	73.3	69.1	70.9	77.6
Primary metals	3.2	5.4	6.8	7.4	6.9	6.0	7.1	7.8	7.1	8.6	10.3
Fabricated metals	1.2	2.0	3.3	3.6	3.1	2.8	3.4	3.6	4.0	4.0	4.3
Electrical machinery	3.5	3.1	9.8	10.6	11.0	11.4	14.6	15.6	14.2	15.3	16.0
Machinery, except electrical	3.8	4.9	11.4	13.7	13.4	13.5	15.4	16.0	13.5	13.8	14.9
Transportation equipment	4.6	5.6	15.0	15.4	12.6	11.3	16.2	19.5	18.9	16.7	16.4
Stone, clay, and glass	1.1	1.7	4.0	3.4	2.9	2.8	3.1	3.4	3.1	3.4	3.6
Nondurable goods ³	17.2	28.3	57.0	66.7	65.3	63.1	72.6	80.2	73.6	74.5	85.4
Food and beverage	3.3	4.4	8.2	9.5	8.7	7.8	8.8	10.3	10.6	11.0	12.7
Paper	1.7	2.9	6.5	6.1	5.6	5.9	7.2	8.6	8.8	8.9	11.4
Chemicals	3.4	7.1	11.6	13.1	12.7	13.0	15.3	16.4	16.8	16.4	18.3
Petroleum	5.2	9.1	19.6	26.0	26.4	23.1	25.5	26.7	17.9	16.9	18.7
Rubber	.9	1.2	2.0	2.2	2.2	2.5	3.1	3.9	3.9	3.5	3.9
Mining	2.0	6.1	16.0	21.4	20.0	15.2	16.9	15.9	11.2	11.3	12.4
Public utilities	13.0	20.2	37.7	41.2	45.4	45.0	47.5	48.8	46.4	44.8	47.2
Transportation	7.2	9.9	16.6	15.8	14.8	14.0	16.5	18.0	18.8	18.8	21.2
Wholesale and retail trade	8.8	14.8	28.4	30.2	30.4	37.0	44.9	50.8	55.5	58.1	(NA)
Finance and insurance	3.8	10.0	21.2	26.0	27.2	28.4	33.9	39.4	43.8	48.0	(NA)
Personal and business services ⁴	9.8	14.8	25.6	27.2	25.9	25.0	28.7	28.7	28.2	30.0	(NA)
Communication	10.4	12.9	24.9	26.9	26.1	24.0	27.2	32.0	32.9	32.1	(NA)
CONSTANT (1982) DOLLARS⁵											
All Industries ²	229.9	246.1	392.7	337.1	310.6	307.0	358.0	392.5	382.4	388.8	435.2
Manufacturing	97.2	97.1	133.0	135.6	120.7	119.1	143.6	159.3	147.0	148.6	167.9
Durable goods ³	48.5	43.8	84.0	83.3	55.4	53.1	66.5	74.6	70.6	72.1	80.4
Primary metals	8.3	9.5	7.9	7.8	6.9	6.0	7.0	7.6	7.0	8.4	(NA)
Fabricated metals	3.0	3.4	3.9	3.8	3.1	2.8	3.4	3.5	3.9	3.9	(NA)
Electrical machinery	8.0	5.1	1.3	11.2	11.0	11.4	14.7	15.9	14.7	15.7	(NA)
Machinery, except electrical	9.1	8.2	13.1	14.4	13.4	13.7	15.9	17.0	14.8	15.1	(NA)
Transportation equipment	11.6	9.7	17.4	16.4	12.6	11.3	18.2	19.6	19.0	16.8	(NA)
Stone, clay, and glass	2.7	2.9	4.6	3.6	2.8	2.7	3.0	3.3	3.0	3.2	(NA)
Nondurable goods ³	48.7	53.3	68.0	72.3	65.3	68.0	77.1	84.7	76.4	76.5	87.4
Food and beverage	8.2	7.6	9.5	10.1	8.7	7.7	8.5	9.9	10.0	10.2	(NA)
Paper	4.5	5.1	7.6	6.5	5.6	5.9	7.2	8.6	8.8	8.8	(NA)
Chemicals	8.8	12.4	13.6	14.0	12.7	13.1	15.5	16.7	17.0	16.4	(NA)
Petroleum	18.4	20.0	25.4	29.0	26.4	26.0	30.2	31.1	29.9	19.8	(NA)
Rubber	2.3	2.1	2.4	2.3	2.2	2.4	3.0	3.7	3.7	3.3	(NA)
Mining	7.0	13.8	21.4	24.2	20.0	17.5	20.8	19.3	13.5	13.8	14.5
Public utilities	34.6	34.3	43.8	43.6	45.4	43.7	45.4	46.1	43.3	41.1	42.4
Transportation	18.4	17.3	19.3	16.9	14.8	13.8	15.6	16.7	17.1	16.8	18.5
Wholesale and retail trade	20.0	24.4	32.4	31.7	30.4	36.8	44.2	50.2	54.6	56.5	(NA)
Finance and insurance	7.9	14.8	23.6	27.0	27.2	29.0	36.7	44.0	50.6	56.0	(NA)
Personal and business services ⁴	23.4	25.3	29.7	28.9	25.9	24.6	27.8	27.8	27.1	28.2	(NA)
Communication	21.4	19.3	29.6	29.3	26.1	22.7	24.9	26.9	28.9	29.1	27.6

NA, Not available. ¹ Estimates based on planned capital expenditures as reported by business in April and May 1988.

² Surveyed quarterly. ³ Includes industries not shown separately. ⁴ Includes construction. ⁵ Procedures for preparing constant-dollar estimates are described in the February 1985 Survey of Current Business. To estimate real spending plans, BEA adjusts the survey results for assumed price changes.

Source: U.S. Bureau of Economic Analysis, Survey of Current Business, monthly.

NO. 879. GROSS PRIVATE DOMESTIC INVESTMENT: 1970 TO 1987

[In billions of dollars]

YEAR	CURRENT DOLLARS				CONSTANT (1982) DOLLARS							
	Gross private domestic investment			Less: Capital con- sumption allow- ances ²	Equals: Net private domes- tic invest- ment	Gross private domestic investment			Less: Capital con- sumption allow- ances ²	Equals: Net private domes- tic invest- ment		
	Total ¹	Fixed Invest- ment	Nonres- iden- tial	Resi- den- tial		Total ¹	Fixed Invest- ment	Nonres- iden- tial	Resi- den- tial			
1970	148.8	145.7	105.2	40.5	88.8	80.0	381.5	373.3	264.0	108.3	229.8	151.8
1975	219.6	225.2	162.8	62.3	161.9	57.8	393.3	396.1	281.2	114.9	287.0	96.3
1980	437.0	445.3	322.8	122.5	303.8	133.1	509.3	516.2	379.2	137.0	356.1	153.2
1981	515.5	491.5	369.2	122.3	347.8	167.7	545.5	521.7	385.2	126.5	360.7	175.8
1982	447.3	471.8	365.7	105.1	383.2	64.1	447.3	471.8	366.7	105.1	383.2	64.1
1983	502.3	509.4	356.8	152.5	396.6	105.7	504.0	510.4	361.2	149.3	394.4	109.6
1984	684.8	597.1	416.0	181.1	415.5	249.4	658.4	596.1	425.2	170.9	407.2	251.2
1985	643.1	631.8	442.9	186.8	437.2	205.9	637.0	627.9	453.5	174.4	426.7	210.3
1986	665.9	650.4	433.9	216.6	455.9	210.0	643.5	628.1	433.1	195.0	443.2	200.3
1987	712.9	673.7	446.8	226.9	480.0	233.0	674.8	640.4	445.1	195.2	460.8	214.0

¹ Includes change in inventories, not shown separately. ² With capital consumption adjustment.

Source: U.S. Bureau of Economic Analysis, The National Income and Product Accounts of the United States, 1929-82, and Survey of Current Business, July Issues.

NO. 880. COMPOSITE INDEXES OF ECONOMIC CYCLICAL INDICATORS: 1978 TO 1987

[1987 figures are preliminary. See source for discussion of composite indexes. Minus sign (-) indicates decrease. **Leading Indicators** are economic time series that tend to reach their cyclical high and low points earlier than the corresponding peaks and troughs in the overall economy. **Coincident Indicators** are economic time series that tend to reach their cyclical high and low points about the same time as the corresponding peaks and troughs in the overall economy. **Lagging Indicators** are economic time series that tend to reach their cyclical high and low points later than the corresponding peaks and troughs in the overall economy.]

ITEM	Unit	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987		
LEADING INDICATORS													
Composite Index ¹		1967=100..	145.8	145.1	138.2	140.9	136.8	156.0	165.3	168.6	179.3	189.5	
Net business formation		1967=100..	138.1	138.3	129.9	148.4	116.4	117.5	121.3	120.9	120.4	120.9	
Building permits ²		1967=100..	145.4	123.6	96.7	80.0	80.7	131.1	134.8	138.1	141.2	123.0	
Common stock prices, index ³		1941-..	43=10..	96.0	103.0	118.8	128.0	119.7	160.4	160.5	188.8	236.3	288.8
Initial claims, unemployment insurance ⁴	1,000..	338	379	480	446	578	428	366	383	370	320		
Change in sensitive prices ⁴	Percent	1.0	.8	—	-5	-7	1.0	-2	-5	.5	2		
Change in credit outstanding ⁵	Percent	14.5	13.2	6.1	6.7	1.4	8.2	15.8	10.1	6.4	6.1		
Vendor performance, slower deliveries	Percent	64	63	40	45	37	54	61	45	52	61		
Average workweek, manufacturing ⁶	Hours	40.4	40.2	39.7	39.8	38.9	40.1	40.7	40.5	40.7	41.0		
Change in Inventories (1982 dol.) ⁷	Bil. dol.	46	18	-15	2	-31	2	49	1	5	28		
Plant and equipment contracts and orders (1982 dol.)	Bil. dol.	381	408	361	352	308	318	386	411	410	452		
New orders, manufacturing, consumer goods and materials (1982 dol.)	Bil. dol.	1,024	1,001	888	886	807	897	962	953	970	1,016		
Money supply (M2) ⁸ (1982 dol.)	Bil. dol.	1,982	1,929	1,835	1,818	1,874	2,043	2,113	2,223	2,366	2,430		
COINCIDENT INDICATORS													
Composite Index		1967=100..	144.0	150.2	144.8	146.0	136.3	139.9	154.5	160.3	164.7	169.4	
Industrial production index		1977=100..	106.5	110.7	108.6	111.0	103.1	109.2	121.4	123.7	125.1	129.8	
Employees, nonagricultural payrolls	Million	86.7	88.9	90.4	91.2	89.6	90.2	94.5	97.5	99.6	102.1		
Personal income less transfer payments (1982 dol.)	Bil. dol.	2,191	2,253	2,233	2,275	2,281	2,301	2,454	2,539	2,640	2,695		
Sales, mfg. and trade (1982 dol.)	Bil. dol.	4,327	4,455	4,341	4,358	4,189	4,360	4,721	4,864	5,018	5,191		
LAGGING INDICATORS													
Composite Index		1967=100..	114.0	122.8	124.8	122.4	124.3	115.4	124.2	135.3	141.9	142.5	
Labor cost per unit of output, mfg. ⁹	Percent	98.0	98.9	102.0	102.9	108.0	100.8	98.6	100.5	100.4	98.7		
Ratio, consumer installment credit to personal income	Percent	13.4	13.9	13.3	12.1	11.9	12.1	13.2	14.5	15.8	15.8		
Average prime rate charged by banks	Percent	9.1	12.7	15.3	16.9	14.9	10.8	12.0	9.8	8.3	8.2		
Average duration of unemployment	Weeks	11.9	10.8	11.9	13.7	15.6	20.0	18.2	15.8	15.0	14.5		
Ratio inventories to sales, mfg. and trade (1982 dol.)	Ratio	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.5	1.5		
Commercial and industrial loans outstanding (1982 dol.) ¹⁰	Bil. dol.	207	219	225	233	268	261	296	330	352	369		

¹ Represents zero. ² Beginning with data for January 1984, net business formation has been suspended from this index.

² New private housing units authorized. ³ Standard and Poor, 500 stocks. ⁴ Producer price index of selected crude and intermediate materials and spot market price index of raw industrial materials. ⁵ Weighted 4-term moving average placed at the terminal month of the span. ⁶ Business and consumer borrowing. ⁷ Production workers. ⁸ See table 821. ⁹ Actual data as percent of trend. ¹⁰ Includes commercial paper issued by nonfinancial companies.

Source: U.S. Bureau of Economic Analysis, *Business Conditions Digest*, monthly.

NO. 881. BUSINESS CYCLE EXPANSIONS AND CONTRACTIONS—MONTHS OF DURATION: 1919 TO 1987

[The lower turning point of a cycle is considered a trough, the upper turning point a peak. Business cycle reference dates are determined by the National Bureau of Economic Research, Inc.]

Trough	Peak	Contraction (trough from previous peak)	Expansion (trough to peak)	LENGTH OF CYCLE	
				Trough from previous trough	Peak from previous peak
March 1919...	January 1920...	7	10	51	17
July 1921...	May 1923...	18	22	28	40
July 1924...	October 1926...	14	27	36	41
November 1927...	August 1929...	13	21	40	34
March 1933...	May 1937...	43	50	64	93
June 1938...	February 1945...	13	80	63	93
October 1945...	November 1948...	8	37	88	45
October 1948...	July 1953...	11	45	48	56
May 1954...	August 1957...	10	39	55	49
April 1958...	April 1960...	8	24	47	32
February 1961...	December 1969...	10	108	94	116
November 1970...	November 1973...	11	36	117	47
March 1975...	January 1980...	16	58	52	74
July 1980...	July 1981...	6	12	64	18
November 1982...	(X)	16	(X)	28	(X)
Average, all cycles:					
1919-1945 (6 cycles)...		18	35	53	53
1945-1982 (8 cycles)...		11	45	56	55
Average, peacetime cycles:					
1919-1945 (5 cycles)...		20	26	46	45
1945-1982 (6 cycles)...		11	34	46	44

X Not applicable.

Source: U.S. Bureau of Economic Analysis, *Business Conditions Digest*, January 1988.

NO. 882. INTERNATIONAL ECONOMIC COMPOSITE INDEXES—AVERAGE ANNUAL PERCENT CHANGE: 1976 TO 1988

[The coincident index changes are for calendar years and the leading index changes are for years ending June 30 because they lead the coincident indexes by about six months, on average. The G-7 countries are United States, Canada, France, West Germany, Italy, United Kingdom and Japan. Average annual percent changes derived from indexes with base 1980=100. Minus sign (—) indicates decrease]

COUNTRIES	1976-1977	1977-1978	1978-1979	1979-1980	1980-1981	1981-1982	1982-1983	1983-1984	1984-1985	1985-1986	1986-1987	1987-1988
LEADING INDEX												
Total, 10 countries	5.4	3.0	5.8	1.6	-1.2	-1.1	.9	10.1	2.6	2.8	5.7	8.5
9 countries, excluding U.S.	4.6	1.0	6.7	5.8	-2.4	-1.6	-3	6.1	4.5	2.7	6.7	10.3
G-7 countries....	5.4	2.9	5.5	1.5	-1.4	-1.1	-9	10.1	2.6	2.6	5.6	8.4
North America	6.2	5.3	4.6	-3.5	.7	-3.7	1.7	15.6	-6	2.7	4.2	5.8
United States	6.8	5.6	4.1	-4.1	.7	-3.5	1.8	15.8	-3	2.7	4.3	5.7
Canada	1.8	2.8	8.5	3.1	1.0	-6.5	.5	11.8	4.5	3.1	2.7	5.5
4 European countries	3.5	3	4.0	2.7	-1.5	1.0	1.0	4.2	2.6	2.6	3.2	3.5
France	2.8	-1.9	4.6	3.7	-6	2.0	-1	3.9	2.7	2.7	5.3	4.3
West Germany	3.4	2.1	5.6	3.0	-3.2	-9	2.3	6.2	2.4	2.6	1.3	4.8
Italy	2.8	-2.0	3.5	4.4	4.5	-1	-1.3	2.1	2.3	5.1	3.6	4
United Kingdom	5.1	2.0	1.8	-1.5	-4.3	3.5	2.1	3.4	2.4	2.6	3.0	2.5
4 Pacific region countries	7.5	1.8	11.5	11.9	-4.6	1.5	-1.0	8.3	7.8	3.0	13.0	20.8
Australia	2.8	-1.1	9.7	5.9	2.0	-4.7	-3.7	9.5	6.8	3.5	3.5	7.2
China: Taiwan	7.0	11.1	11.9	4.8	5.7	5.0	8.1	11.8	6.5	8.1	13.6	14.5
Japan	8.0	1.3	12.0	13.8	-8.0	1.7	-1.6	8.1	8.1	2.3	14.0	23.0
South Korea	10.0	11.5	8.8	-2.5	5.0	6.7	8.1	9.2	4.7	9.7	16.7	12.9
COINCIDENT INDEX												
Total, 10 countries	4.5	5.4	4.4	.2	.5	-2.2	1.8	6.1	3.9	3.2	3.9	(NA)
9 countries, excluding U.S.	3.2	3.9	4.9	2.5	.5	-6	1.4	3.7	4.0	3.6	3.9	(NA)
G-7 countries....	4.8	5.4	4.4	-1	.3	-2.3	1.9	6.0	3.7	3.0	3.7	(NA)
North America	8.1	7.4	3.5	-2.4	.7	-6.2	2.5	9.7	3.7	2.7	3.9	(NA)
United States	8.3	7.7	3.5	-2.9	-1.4	-6.3	2.7	9.8	3.6	2.5	3.9	(NA)
Canada	2.5	4.0	5.0	2.0	3.8	-5.0	2.1	6.4	5.2	3.7	4.7	(NA)
4 European countries	2.7	3.3	4.2	1.6	-1.7	-3.3	.6	2.1	3.0	3.5	3.4	(NA)
France	2.8	1.6	2.5	1.4	-1.3	3.0	1.9	6.6	1.4	3.5	4.1	(NA)
West Germany	3.0	3.4	4.8	2.6	-1.9	-5.5	-6	2.6	3.7	4.5	2.9	(NA)
Italy	2.1	2.5	4.9	5.2	-1.1	-3	-1	2.7	3.1	1.9	1.6	(NA)
United Kingdom	2.5	5.8	5.2	-2.2	-5.7	-1.0	1.6	2.5	4.1	3.0	4.5	(NA)
4 Pacific region countries	4.6	5.0	6.2	4.0	3.6	2.9	2.3	5.9	5.1	9.7	4.7	(NA)
Australia	-9	1.8	3.7	5.2	5.9	-2.2	-6.9	9.1	7.3	5.1	3.6	(NA)
China: Taiwan	10.6	13.9	9.9	7.5	5.6	2.7	7.1	12.2	4.1	9.6	11.7	(NA)
Japan	4.9	4.6	6.5	4.2	5.1	3.3	2.8	5.1	5.0	2.8	3.9	(NA)
South Korea	11.9	14.7	3.6	-5.0	6.9	5.8	11.1	8.9	5.1	11.7	13.4	(NA)

NA Not available.

Source: Center for International Business Cycle Research, Columbia Business School, New York, NY, *International Economic Indicators*, monthly.

NO. 883. MANUFACTURING AND TRADE—SALES AND INVENTORIES IN CURRENT AND CONSTANT (1982) DOLLARS: 1970 TO 1987

[In billions of dollars, except ratios]

ITEM	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
CURRENT DOLLARS												
Sales, average monthly	107	182	261	298	328	357	349	369	409	419	425	453
Manufacturing.....	53	87	127	144	154	168	163	171	188	190	189	201
Retail trade	31	49	67	75	80	87	89	98	107	115	120	126
Merchant wholesalers	24	47	67	79	93	102	96	100	113	115	116	127
Inventories 1	178	289	400	451	494	528	582	574	620	645	657	710
Manufacturing.....	102	160	211	241	264	283	317	307	326	331	318	334
Retail trade	44	72	103	111	116	127	133	139	157	172	188	211
Merchant wholesalers	32	57	86	99	113	118	130	127	136	143	153	165
Inventory-sales ratio 2	1.82	1.52	1.44	1.44	1.41	1.52	1.87	1.58	1.52	1.54	1.55	1.57
Manufacturing.....	1.91	1.77	1.55	1.61	1.61	1.74	1.94	1.80	1.73	1.74	1.68	1.66
Retail trade	1.39	1.38	1.44	1.42	1.40	1.46	1.49	1.42	1.47	1.50	1.55	1.67
Merchant wholesalers	1.30	1.19	1.22	1.16	1.10	1.20	1.35	1.27	1.20	1.24	1.32	1.30
CONSTANT (1982) DOLLARS												
Sales, average monthly 3	260	306	373	373	372	357	346	383	403	414	432	445
Manufacturing.....	131	149	183	179	175	167	159	178	186	189	192	201
Retail trade	70	83	97	96	93	91	94	102	108	112	119	119
Merchant wholesalers	60	74	93	88	104	99	93	102	109	113	121	125
Inventories.....	428	496	578	589	591	602	582	584	631	638	645	675
Manufacturing.....	248	282	314	325	327	330	315	309	330	321	317	322
Retail trade	97	116	139	137	130	136	133	142	158	169	172	191
Merchant wholesalers	83	99	125	128	134	136	134	139	143	149	155	161
Inventory-sales ratio 4	1.64	1.62	1.55	1.58	1.59	1.68	1.68	1.53	1.58	1.54	1.49	1.52
Manufacturing.....	1.90	1.90	1.71	1.81	1.87	1.98	1.89	1.74	1.77	1.70	1.65	1.61
Retail trade	1.39	1.39	1.44	1.42	1.40	1.48	1.41	1.39	1.46	1.51	1.44	1.61
Merchant wholesalers	1.39	1.34	1.34	1.30	1.29	1.37	1.44	1.30	1.31	1.32	1.28	1.29

¹ Book value; seasonally adjusted end-of-year data. See text, section 17. ² Average inventories to average sales. Average inventories based on weighted averages of end-of-month figures. ³ Average monthly sales for fourth quarter. ⁴ End of fourth quarter inventories to average monthly sales for fourth quarter.

Source: Current dollars from U.S. Bureau of the Census, *Current Business Reports*, "Manufacturing and Trade Inventories and Sales" April 1988 and unpublished data; constant dollars from U.S. Bureau of Economic Analysis, *Survey of Current Business*, February and September issues, and unpublished data.

Business Enterprise

NO. 884. MANUFACTURING CORPORATIONS, ASSETS, AND PROFITS, BY ASSET SIZE: 1970 TO 1987

[Corporations and assets as of end of 4th quarter; profit for entire year. Through 1979, corporations under \$10 million based on sample; \$10 million and over based on complete canvass, thereafter, under \$25 million based on sample and \$25 million and over based on complete canvass. For details regarding methodology, see source for first quarter, 1987]

YEAR AND ITEM	Unit	Total	ASSET-SIZE CLASS							
			Under \$10 mil.	\$10- \$25 mil.	\$25- \$50 mil.	\$50- \$100 mil.	\$100- \$250 mil.	\$250 mil.- \$1 bil.	\$1 bil. and over	
Corporations:										
1970.....	Number.....	197,807	2 195,000	1,202	533	368	289	218	102	
1975.....	Number.....	(NA)	(NA)	1,750	705	450	392	276	151	
1977.....	Number.....	(NA)	(NA)	1,793	809	501	409	327	174	
1978.....	Number.....	(NA)	(NA)	1,780	802	518	408	320	181	
1979.....	Number.....	(NA)	(NA)	1,918	979	571	470	341	225	
1980.....	Number.....	(NA)	(NA)	1,777	941	590	491	369	244	
1981.....	Number.....	(NA)	(NA)	845	603	520	376	259		
1982.....	Number.....	(NA)	(NA)	872	663	559	403	275		
1983.....	Number.....	(NA)	(NA)	799	872	703	601	420	267	
1984.....	Number.....	(NA)	(NA)	883	896	744	608	428	281	
1985.....	Number.....	(NA)	(NA)	914	882	741	628	445	291	
1986.....	Number.....	(NA)	(NA)	889	1,007	811	676	481	318	
1987.....	Number.....	(NA)	(NA)	889	1,007	811	676	481	318	
Assets:										
1970.....	Mil. dol.....	578,234	69,101	20,471	20,138	25,946	47,783	112,475	282,320	
1975.....	Mil. dol.....	810,910	98,147	31,307	24,720	31,395	62,524	139,113	423,705	
1977.....	Mil. dol.....	982,998	102,241	35,603	28,595	35,032	63,590	160,107	537,830	
1978.....	Mil. dol.....	1,086,433	114,006	38,358	30,813	37,429	66,907	184,958	633,983	
1979.....	Mil. dol.....	1,242,985	124,853	42,007	34,082	40,338	73,172	189,599	758,937	
1980.....	Mil. dol.....	1,384,474	126,639	43,569	34,930	41,983	75,284	179,959	882,129	
1981.....	Mil. dol.....	1,580,353	136,915	57,453	39,756	43,924	82,284	188,913	1,011,105	
1982.....	Mil. dol.....	1,614,018	141,363	55,327	38,933	48,013	78,766	180,047	1,072,169	
1983.....	Mil. dol.....	1,704,951	149,791	54,508	41,766	52,673	87,391	194,212	1,124,812	
1984.....	Mil. dol.....	1,853,457	156,871	59,549	49,419	53,517	94,315	206,698	1,233,288	
1985.....	Mil. dol.....	1,932,766	153,883	64,324	52,668	58,019	96,748	208,403	1,298,720	
1986.....	Mil. dol.....	1,984,120	3 140,864	67,683	55,974	58,233	97,908	217,341	1,356,137	
1987.....	Mil. dol.....	2,135,266	3 147,919	65,823	50,171	60,874	109,458	235,368	1,465,853	
Net profit: 4										
1970.....	Mil. dol.....	28,572	2,812	811	836	1,101	2,315	5,862	14,832	
1975.....	Mil. dol.....	49,135	6,212	1,831	1,327	1,676	3,553	8,165	26,370	
1977.....	Mil. dol.....	70,386	8,683	2,189	1,667	2,252	4,401	11,208	39,769	
1978.....	Mil. dol.....	81,185	9,417	2,487	2,284	2,602	4,712	12,311	47,391	
1979.....	Mil. dol.....	98,698	10,119	2,720	2,347	2,898	5,347	13,412	61,854	
1980.....	Mil. dol.....	92,443	7,770	2,235	1,904	2,479	4,532	11,485	62,041	
1981.....	Mil. dol.....	101,302	8,883	3,077	1,944	2,415	4,580	10,087	70,354	
1982.....	Mil. dol.....	71,028	5,193	2,278	1,198	1,421	2,643	6,892	51,405	
1983.....	Mil. dol.....	85,834	7,438	2,893	2,149	2,468	3,881	6,194	60,893	
1984.....	Mil. dol.....	107,648	10,037	3,417	2,527	2,877	4,864	8,278	74,648	
1985.....	Mil. dol.....	67,647	8,601	2,551	2,305	2,819	3,828	7,312	60,431	
1986.....	Mil. dol.....	83,122	3 6,659	2,988	2,129	2,514	3,884	7,572	57,376	
1987.....	Mil. dol.....	115,600	3 7,273	3,849	2,763	3,338	5,237	9,636	83,514	

NA. Not available. 1 Source: U.S. Securities and Exchange Commission. 2 Data derived from U.S. Internal Revenue Service, *Statistics of Income*, annual. 3 Excludes estimates for corporations with less than \$250,000 in assets at time of sample selection. Prior periods include estimates for corporations in this size category. 4 After taxes.

Source: Except as noted, through 1981, U.S. Federal Trade Commission; thereafter, U.S. Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations*.

NO. 885. LARGEST INDUSTRIAL CORPORATIONS—SALES, ASSETS, NET INCOME, AND EMPLOYEES, BY SALES GROUP RANK: 1985 TO 1987

[Sales, assets, and net income in billions of dollars; employees in thousands, except percent. Excludes large privately owned companies that do not publish sales. Includes service and rental revenues, but companies must derive more than 50 percent of revenues from manufacturing or mining for years ending not later than Dec. 31 of year stated; sales exclude excise taxes collected by manufacturer and include discontinued operations]

RANK BY SALES GROUP	SALES			ASSETS 1			NET INCOME 2			EMPLOYEES 3		
	1985	1986	1987	1985	1986	1987	1985	1986	1987	1985	1986	1987
500 largest.....	1,807.1	1,723.6	1,879.5	1,519.4	1,560.8	1,705.7	69.8	64.1	90.6	14,065	13,382	13,144
Top 100.....	1,264.1	1,193.7	1,306.9	1,068.6	1,114.7	1,217.2	53.5	48.0	65.7	8,789	8,529	8,333
101-200.....	265.5	262.4	286.6	224.8	219.6	240.4	7.0	8.4	14.3	2,465	2,302	2,302
201-300.....	140.7	131.9	142.1	114.0	107.1	123.1	4.9	3.6	5.3	1,390	1,233	1,189
301-400.....	83.6	82.2	88.2	72.9	75.5	72.8	2.5	2.4	2.3	886	792	787
401-500.....	53.2	53.5	55.7	39.9	43.9	52.2	1.7	1.7	2.9	525	512	532
Percent of total:												
Top 100.....	69.9	69.2	69.5	70.3	71.4	71.4	76.9	74.9	72.5	62.5	63.8	63.4
101-200.....	14.7	15.2	15.2	14.8	14.1	14.1	10.1	13.1	15.8	17.5	17.3	17.5
201-300.....	7.8	7.6	7.6	7.5	6.9	7.2	7.0	5.6	5.8	9.8	9.2	9.0
301-400.....	4.6	4.8	4.7	4.8	4.8	4.3	3.6	3.7	2.5	6.3	5.9	6.0
401-500.....	2.9	3.1	3.0	2.5	2.8	3.1	2.4	2.7	3.2	3.8	3.8	4.0

1 Total assets employed in business at end of fiscal year, less depreciation and depletion. 2 After taxes, special charges, and credits. 3 As of year end, or yearly average.

Source: Time, Inc., New York, NY, *The Fortune Directories*. (Copyright.)

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No. 886. 500 LARGEST INDUSTRIAL CORPORATIONS—SELECTED FINANCIAL ITEMS: 1970 TO 1987

ITEM	Unit	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Sales per employee.....	\$1,000.....	29.5	50.3	71.1	75.9	91.0	92.2	100.6	106.0	110.7	124.4
Changes in profits.....	Percent.....	(NA)	(NA)	(NA)	(NA)	(NA)	12.0	24.9	-19.1	-7.9	41.3
Sales per dollar of stockholder's equity	Dollar.....	2.4	2.7	3.12	2.97	2.74	2.66	2.78	2.80	2.79	2.79
Return on stockholder's equity	Percent.....	9.5	11.6	14.1	13.6	10.9	10.7	13.6	11.6	11.6	14.4
Return on sales.....	Percent.....	3.9	3.9	4.5	4.3	3.6	3.8	4.5	3.9	4.1	5.1
Total return to investors ¹	Percent.....	6.5	51.2	21.6	1.4	21.2	30.2	-8	26.3	16.1	6.6

NA Not available. ¹ Includes both price appreciation and dividend yield, i.e., to an investor in the company's stock.

No. 887. 500 LARGEST INDUSTRIAL CORPORATIONS—SELECTED FINANCIAL ITEMS, BY INDUSTRY: 1986 AND 1987

[Data are medians and are ranked based on sales per employee for latest year shown. See headnote, table 885. Minus sign (–) indicates decrease. For definition of median, see Guide to Tabular Presentation]

INDUSTRY	SALES PER EMPLOYEE (\$1,000)		CHANGES IN PROFITS (percent)		SALES PER DOLLAR OF STOCKHOLDER'S EQUITY (dol.)		RETURN ON STOCKHOLDER'S EQUITY (percent)		RETURN ON SALES (percent)		TOTAL RETURN TO INVESTORS ¹ (percent)	
	1986	1987	1986	1987	1986	1987	1986	1987	1986	1987	1986	1987
Total.....	110.7	124.4	(NA)	(NA)	2.79	2.77	11.6	14.4	4.1	5.1	16.1	6.6
Petroleum refining.....	409.5	416.5	-45.7	1	2.93	3.05	5.8	10.2	2.4	3.4	4.0	6.8
Mining, crude-oil production.....	190.2	248.7	30.7	14.2	1.85	1.86	7.7	7.0	3.8	3.3	-5	24.5
Soaps, cosmetics.....	163.0	181.1	22.9	13.6	3.11	3.64	16.7	16.2	5.4	4.9	15.4	6.0
Food.....	167.3	178.3	14.2	19.5	5.42	5.32	15.8	16.1	2.8	3.5	36.5	3.4
Chemicals.....	164.4	173.1	25.9	29.4	2.28	2.41	11.8	14.2	5.2	6.0	25.2	8.5
Beverages.....	151.4	160.6	11.4	11.2	2.26	2.06	18.8	14.0	7.7	7.0	16.4	-2
Metals.....	134.3	157.1	39.2	53.6	2.52	2.73	5.1	11.1	1.5	4.3	-8.5	50.5
Tobacco.....	142.2	150.3	8.7	24.6	2.62	2.63	22.1	20.0	7.0	8.3	48.7	19.2
Forest products.....	131.1	145.6	19.4	59.7	2.30	2.22	11.8	14.7	4.9	6.5	30.9	9.1
Building materials.....	125.1	140.8	19.5	17.2	2.30	2.14	11.5	14.4	3.6	6.8	15.1	25.2
Transportation equipment ²	113.2	125.9	-25.0	(NA)	3.45	5.51	5.2	23.1	1.7	3.1	9.3	-1.1
Pharmaceuticals.....	111.4	123.5	20.3	15.1	1.95	1.97	23.6	22.7	19.1	13.2	27.9	11.7
Rubber products.....	94.2	107.2	19.6	51.9	3.38	3.48	10.8	13.1	2.3	5.7	38.2	15.7
Metal products.....	94.9	105.1	10.8	35.3	2.83	2.93	13.3	14.3	4.4	5.4	22.0	12.0
Computers (incl. office equip.).....	97.3	105.0	25.6	26.9	1.94	2.17	10.8	14.6	6.5	8.2	16.5	6.3
Publishing, printing.....	95.1	103.8	10.5	15.8	2.21	2.13	18.7	18.9	8.5	8.4	14.5	6.7
Motor vehicles and parts.....	105.5	101.9	11.0	20.6	3.48	3.48	10.1	11.6	3.0	3.5	5.2	-7.7
Aerospace.....	88.7	98.9	-4.3	3.9	4.01	4.21	12.4	11.3	4.1	3.7	-8	-24.5
Industrial and farm equipment.....	92.1	97.7	18.6	42.4	2.59	2.98	3.7	11.2	1.2	3.3	8.2	10.0
Scientific, photographic equipment.....	84.7	94.5	4.7	21.9	1.98	1.92	10.3	16.3	4.7	8.3	22.9	.5
Electronics.....	81.6	85.1	6.1	17.1	2.77	2.46	9.8	14.1	3.4	5.0	6.7	1.4
Furniture.....	66.9	75.4	-7.2	8.0	3.20	2.61	18.9	15.2	5.8	5.2	17.8	-7.0
Textiles.....	73.1	71.3	93.1	24.3	3.24	3.26	8.1	12.8	3.0	4.1	36.8	-6.3
Apparel.....	54.6	52.2	29.7	29.0	3.21	3.14	12.2	14.1	3.3	3.9	21.5	-18.9

NA Not available. ¹ Includes both price appreciation and dividend yield, i.e., to an investor in the company's stock.

² Excludes motor vehicles and aircraft.

Source of tables 886 and 887: Time, Inc., New York, NY, *The Fortune Directories*. (Copyright.)

No. 888. CORPORATE PROFITS, TAXES, AND DIVIDENDS: 1970 TO 1987

[In billions of dollars. Covers corporations organized for profit. Represents profits to U.S. residents, without deduction of depletion charges and exclusive of capital gains and losses; intercorporate dividends from profits of domestic corporations are eliminated; net receipts of dividends, reinvested earnings of incorporated foreign affiliates, and earnings of unincorporated foreign affiliates are added]

ITEM	1970	1975	1976	1979	1980	1981	1982	1983	1984	1985	1986	1987
Profits before taxes.....	76.0	134.8	239.5	257.2	237.1	226.5	189.6	207.6	240.0	224.3	236.4	276.7
Less: Income tax liability ¹	34.4	50.9	83.5	88.0	84.8	81.1	63.1	77.2	93.9	96.4	106.8	133.8
Equals: Profits after taxes.....	41.7	83.9	150.0	169.2	152.3	145.4	106.5	130.4	146.1	127.8	129.8	142.9
Less: Net dividends ²	22.5	29.8	44.7	50.1	54.7	63.6	66.9	71.5	78.0	83.3	88.2	95.5
Equals: Undistributed profits.....	18.2	54.3	105.2	119.1	97.6	81.8	39.6	58.9	67.0	44.6	41.6	47.4
Capital consumption allowances ³	57.9	90.2	126.3	144.3	164.6	196.3	225.8	259.7	287.2	328.3	336.6	349.2
Profits after tax plus capital consumption allowances ³	98.9	174.1	276.3	313.5	316.9	341.7	332.3	390.1	433.3	456.1	466.4	492.1

¹ Federal, State and local. ² Disbursements to U.S. residents, measured after eliminations of intercorporate dividends.

³ Without capital consumption adjustment. Includes depreciation and accidental damages.

Source: U.S. Bureau of Economic Analysis, *The National Income and Products Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

Business Enterprise

No. 889. CORPORATE PROFITS, BY INDUSTRY: 1980 TO 1987

[In billions of dollars. Profits are without inventory valuation and capital consumption adjustments. Minus sign (-) indicates loss. See headnote, table 888.]

INDUSTRY	BEFORE TAXES						AFTER TAXES					
	1980	1983	1984	1985	1986	1987	1980	1983	1984	1985	1986	1987
Domestic industries, total	202.7	177.5	209.0	193.1	204.4	240.3	117.9	100.2	115.1	96.7	97.9	106.5
Agriculture	.6	-.2	.1	-.1	-.1	-.1	.2	-.4	-.2	-.4	-.4	-.6
Mining	6.5	-1.8	-1.6	-5.0	-4.7	-1.7	4.7	-2.1	-2.4	-5.2	-4.9	-2.3
Construction	6.5	3.4	4.3	5.7	7.0	7.8	4.4	2.1	3.0	3.9	4.8	4.9
Manufacturing	98.3	74.1	92.1	81.2	75.7	102.9	57.1	42.6	53.7	48.6	39.5	56.2
Transportation	3.7	4.5	6.7	2.8	4.1	5.8	2.1	2.7	4.8	1.0	2.0	2.9
Communications	7.5	9.1	11.7	13.1	17.4	17.5	5.6	7.2	8.1	9.2	13.1	12.1
Public utilities	9.7	14.6	20.1	16.1	13.8	12.8	7.1	10.6	14.6	10.8	7.8	5.1
Wholesale and retail trade	39.0	45.0	52.7	45.1	46.2	50.8	26.8	31.8	37.3	28.2	27.9	27.8
Finance, insurance	22.8	17.4	11.4	20.7	30.5	29.8	3.1	-2.4	-11.4	-8.9	-2.6	-9.6
Services	9.8	11.5	11.3	13.4	14.6	14.7	6.9	8.2	7.7	9.5	10.7	9.7
Rest of world	34.4	30.2	30.9	31.2	31.9	36.4	34.4	30.2	30.9	31.2	31.9	36.4

¹ Includes forestry and fisheries. ² Includes real estate. ³ Consists of receipts by all U.S. residents, including both corporations and persons, of earnings of unincorporated foreign affiliates, dividends from their incorporated foreign affiliates, and their share of reinvested earnings of their incorporated foreign affiliates, net of corresponding outflows.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

No. 890. CORPORATE PROFITS—FINANCIAL AND NONFINANCIAL INDUSTRIES: 1970 TO 1987

[In billions of dollars. Minus sign (-) indicates loss. See headnote, table 888.]

ITEM	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Corporate profits with IVA ¹ and CCA ²	74.7	117.6	197.2	200.1	177.2	186.0	150.0	213.7	266.3	282.3	298.9	310.4
Domestic industries	67.8	103.2	175.0	168.4	142.8	159.4	121.9	183.6	236.0	251.2	268.9	274.0
Financial	12.3	11.6	29.1	27.3	19.7	15.2	10.1	18.0	13.8	25.9	36.4	36.5
Nonfinancial	55.4	91.6	146.3	139.1	123.1	144.2	111.9	165.6	222.4	225.3	230.6	237.5
Rest of the world	6.9	14.4	22.2	33.7	34.4	28.5	28.0	30.2	30.9	31.2	31.9	36.4
Corporate profits with IVA ¹	69.5	123.9	208.2	214.1	194.0	202.3	159.2	196.7	234.2	222.6	244.7	268.7
Domestic industries	62.6	109.5	186.0	180.4	159.8	173.8	131.2	186.6	203.3	191.4	212.6	222.3
Financial	12.2	11.2	29.1	27.8	21.0	16.5	11.8	16.1	13.0	22.8	31.8	30.1
Federal Reserve banks	3.6	5.7	7.7	9.6	11.9	14.5	15.4	14.8	16.7	16.8	16.0	16.0
Other	8.6	5.5	21.4	18.2	9.0	1.9	-3.6	3.3	-3.7	6.1	15.8	14.1
Nonfinancial	50.4	98.3	156.8	152.6	138.6	157.3	119.4	148.5	190.3	168.6	180.8	192.1
Manufacturing	26.7	53.6	88.7	87.5	77.1	88.5	56.0	70.1	88.8	79.7	79.4	96.8
Durable goods ³	10.2	19.8	44.6	37.3	21.3	21.0	2.1	17.2	38.1	28.5	32.4	36.5
Primary metal industries	.8	2.7	3.5	3.6	2.5	3.1	-4.9	-4.9	-8.4	-1.4	-5.6	1.4
Fabricated metal products	1.1	3.1	4.8	5.2	4.3	4.4	2.4	3.0	4.7	4.6	5.4	5.7
Machinery, except electrical	3.0	4.8	9.6	9.1	7.7	8.8	4.1	3.1	6.2	3.2	3.3	3.2
Electrical and electronic equipment	1.2	2.4	6.7	5.2	4.7	4.1	1.7	3.7	5.5	3.6	3.2	3.2
Motor vehicles and equipment	1.2	2.0	8.8	4.7	-2.5	.1	-8	5.1	9.0	7.2	7.6	7.3
Nondurable goods ³	16.5	33.8	44.0	50.2	55.8	67.5	55.9	53.0	50.7	51.2	47.0	60.3
Food and kindred products	3.2	8.8	6.2	5.6	6.1	8.7	7.0	7.2	6.7	8.3	11.2	12.8
Chemicals and allied products	3.9	6.4	8.2	7.2	5.4	8.2	5.2	6.7	8.0	6.2	6.5	13.5
Petroleum and coal products	3.5	9.5	14.7	22.5	31.4	36.5	29.1	21.4	17.2	17.5	7.0	12.2
Transportation and public utilities	8.2	10.3	20.9	15.2	17.6	19.5	19.3	28.5	38.5	33.0	39.2	34.9
Wholesale and retail trade	9.6	22.2	27.3	28.7	21.6	32.5	34.6	38.9	51.2	44.1	46.1	42.8
Other	5.9	12.2	20.0	21.1	22.4	16.8	7.5	10.9	11.8	11.8	16.3	17.6

¹ Inventory valuation adjustment. ² Capital consumption adjustment. ³ Includes other industries not shown separately. Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

No. 891. CORPORATE PHILANTHROPY AS A PERCENT OF PRETAX NET INCOME: 1984 TO 1987

[Data are based on a sample of 1,200 corporations. Corporation must have given at least \$100,000.]

INDUSTRY CLASS	1984	1985	1986	1987	INDUSTRY CLASS	1984	1985	1986	1987
All firms, average	.93	.99	1.50	1.31	Manufacturing firms, average—Con.				
Manufacturing firms, average	.90	1.05	2.15	1.73	Pharmaceuticals	1.30	1.23	1.78	1.92
Chemicals	1.03	1.31	1.94	1.52	Primary metal industries	1.24	.56	3.00	(1)
Electrical machinery and equipment	.90	1.33	2.77	3.05	Printing and publishing	1.19	1.22	1.51	1.02
Fabricated metal products	1.26	.94	1.24	1.211	Rubber, misc. plastic products	.80	1.25	(3)	(3)
Food, beverage and tobacco	1.10	1.10	2.25	1.96	Stone, clay and glass products	1.04	1.89	.98	(1)
Machinery, nonelectrical	.95	1.39	1.79	1.18	Textiles	2.89	4.87	1.37	.82
Mining	.88	1.69	(2)	(2)	Transportation equipment	.88	.99	1.84	.74
Paper and like products	1.15	1.23	1.05	.89	Nonmanufacturing firms, average	1.01	.88	.77	.88
Petroleum and gas	.70	.76	2.56	1.36					

¹ Primary metals and stone, clay, and glass firms included with fabricated metal firms. ² Mining firms included with petroleum firms. ³ Rubber and miscellaneous plastic firms included with transportation firms.

Source: Duffy, Maureen Nevin, *Annual Survey of Corporate Contributions*, The Conference Board, New York, NY. (Copyright.)

NO. 892. SELECTED INDUSTRY RATIOS—CORPORATE PROFITS, STOCKHOLDERS' EQUITY, SALES AND DEBT: 1980 TO 1987

[Averages of quarterly figures at annual rates. Beginning 1986, data exclude estimates for corporations with less than \$250,000 in assets at time of sample selection. Data are not necessarily comparable from year to year due to changes in accounting procedures, industry classifications, sampling procedures, etc.; for detail, see source. Based on sample; see source for discussion of methodology. Minus sign (—) indicates loss]

INDUSTRY GROUP	RATIO OF PROFITS TO STOCKHOLDERS' EQUITY (percent)				PROFITS PER DOLLAR OF SALES (cents)				RATIO OF STOCKHOLDERS' EQUITY TO DEBT			
	1980	1985	1986	1987	1980	1985	1986	1987	1980	1985	1986	1987
All manufacturing corporations ¹	13.9	10.1	9.5	12.8	4.9	3.8	3.8	4.9	2.3	1.9	1.8	1.6
Durable goods industries.....	11.2	9.2	7.5	11.9	4.0	3.4	2.9	4.5	2.2	2.2	2.2	1.9
Stone, clay, and glass products.....	10.8	7.9	10.5	15.4	4.2	3.1	3.9	5.3	1.9	1.7	1.5	1.1
Primary metal industries.....	11.7	7.9	-10.0	9.3	4.1	-2.6	3.0	2.6	1.7	1.2	1.1	1.1
Iron and steel.....	9.0	-11.0	38.5	15.7	2.9	-2.6	-7.3	2.7	1.7	.8	.7	.7
Nonferrous metals.....	15.6	-5.7	4.3	6.1	5.8	-2.5	2.0	2.5	1.8	1.6	1.6	1.5
Fabricated metal products.....	13.9	9.2	8.7	11.7	4.2	2.8	2.8	3.6	2.1	1.6	1.6	1.5
Machinery, exc. electrical.....	15.0	9.3	6.0	9.2	6.5	4.7	3.3	4.9	2.2	2.6	2.5	2.3
Electrical and electronic equipment.....	15.1	8.3	8.9	10.8	5.0	3.4	3.9	4.6	2.6	2.7	2.5	2.3
Transportation equipment.....	—.6	15.4	12.4	15.5	—.3	4.1	3.6	4.8	2.7	2.9	2.7	2.1
Motor vehicles and equipment.....	-9.3	18.2	14.4	16.3	-3.4	4.9	4.2	5.3	3.4	4.2	3.2	2.3
Aircraft, guided missiles and parts.....	16.0	11.1	9.4	14.6	4.3	3.1	2.9	4.2	2.8	2.6	2.8	2.3
Instruments and related products.....	17.5	10.1	3.1	11.4	8.3	5.7	1.8	6.2	4.3	3.5	3.0	2.5
Nondurable goods industries.....	16.4	11.0	11.5	13.7	5.6	4.1	4.6	5.2	2.3	1.7	1.5	1.4
Food and kindred products ²	14.7	15.3	16.2	17.4	3.4	4.1	4.2	4.6	1.9	1.4	1.1	1.1
Tobacco manufactures.....	19.8	(2)	(2)	(2)	11.7	(3)	(3)	(3)	1.8	(3)	(3)	(3)
Textile mill products.....	8.5	8.6	13.1	15.0	2.2	2.4	3.7	3.9	2.0	1.5	1.5	1.2
Paper and allied products.....	12.1	9.7	10.7	14.7	5.1	4.0	4.4	5.8	2.0	1.7	1.5	1.5
Printing and publishing.....	16.4	19.2	18.6	17.6	5.5	6.5	6.7	6.1	2.1	1.7	1.6	1.4
Chemicals and allied products.....	15.4	8.4	12.9	15.6	7.1	4.7	6.2	7.4	2.2	2.1	1.7	1.7
Industrial.....	11.9	4.2	12.5	16.3	5.4	2.2	6.0	7.6	1.9	1.8	1.5	1.4
Drugs.....	19.9	15.2	23.0	17.6	18.2	9.8	14.6	10.4	3.0	3.2	2.5	2.3
Petroleum and coal products.....	20.0	8.5	6.1	7.7	7.7	4.0	3.8	4.5	3.4	1.6	1.5	1.6
Rubber and msc., plastics products.....	6.7	9.5	11.9	21.5	2.0	2.6	3.4	5.2	1.6	1.6	1.5	1.0
Mining corporations, total ³	19.2	-4.0	-16.6	-3.8	11.3	-3.2	-14.4	-2.8	1.3	1.0	1.0	1.0
Retail trade corporations, total ³	13.2	12.5	12.3	12.5	1.7	2.2	2.3	2.1	1.2	1.4	1.3	1.1
Wholesale trade corporations, total ³	17.3	8.7	8.4	8.4	1.8	1.0	1.1	1.0	1.2	1.0	1.0	1.0

¹ Includes other industries not shown separately. ² Beginning 1985, tobacco included in food and kindred products.

³ Beginning 1985, represents results of companies with assets over \$25 million.

Source: 1980, U.S. Federal Trade Commission; thereafter, U.S. Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations*. In U.S. Council of Economic Advisors, *Economic Report of the President*, annual.

NO. 893. U.S. PARENT COMPANIES AND THEIR FOREIGN AFFILIATES—ASSETS, SALES, EMPLOYMENT, EMPLOYEE COMPENSATION, U.S. EXPORTS AND IMPORTS: 1986

[In millions of dollars, except as indicated]

INDUSTRY ¹	U.S. PARENTS				FOREIGN AFFILIATES				U.S. exports shipped to foreign affiliates	U.S. imports shipped from foreign affiliates
	Total assets	Sales	Employment (1,000)	Employee compensation	Total assets	Sales	Employment (1,000)	Employee compensation		
All industries.....	3,813,832	2,543,961	17,861.0	561,826	932,225	930,764	6,262.7	117,341	71,284	65,580
Petroleum.....	423,046	289,215	812.5	33,638	174,973	199,797	296.3	9,978	1,900	7,492
Manufacturing.....	1,408,850	1,261,476	10,384.7	350,767	355,646	450,037	4,175.1	76,228	51,055	51,645
Food and kindred products.....	148,338	163,009	1,215.5	28,618	28,595	44,536	405.3	5,893	1,087	697
Chemical and allied products.....	210,419	181,921	1,264.1	44,952	75,638	80,301	571.8	11,161	5,702	2,661
Primary and fabricated metals.....	84,567	76,812	657.3	22,702	22,119	23,783	271.6	4,565	1,132	1,400
Machinery (except electrical).....	157,830	128,368	1,237.9	48,248	56,982	71,204	581.8	13,858	6,738	5,677
Electric and electronic equipment.....	193,520	159,747	1,558.8	54,547	39,556	46,033	745.7	11,442	7,125	7,963
Transportation equipment.....	395,804	333,128	2,310.8	89,023	69,456	110,834	751.3	15,509	24,189	28,322
Other.....	228,371	218,492	2,139.3	62,676	63,301	73,346	847.6	14,060	5,083	4,924
Wholesale trade.....	66,919	172,654	325.7	8,536	81,200	149,549	483.0	11,892	16,980	4,932
Finance (except banking), insurance, real estate.....	1,294,805	337,644	1,006.5	38,651	238,260	36,524	147.9	3,647	15	—
Services.....	91,490	76,252	1,273.7	25,389	25,662	25,489	320.8	6,464	174	24
Other industries.....	528,721	406,720	4,058.0	104,846	56,483	65,368	839.6	9,132	1,160	1,487

¹ Represents zero.

¹ Represents industry of U.S. parent or industry of foreign affiliate.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, June 1988.

Business Enterprise

NO. 894. U.S. LARGEST PUBLIC COMPANIES—RETURN ON EQUITY, DEBT-EQUITY RATIO, SALES, AND EARNINGS PER SHARE—BY INDUSTRY: 1983 TO 1987

[In percent, except ranks. For fiscal years ending in the 12 month period ending September 30. Included in the Forbes Universe of 1,000 companies is every firm with revenue of over \$475 million in 1987. Represents industry medians; calculated by listing companies in rank order and selecting the midpoint. Where there is an even number of companies, an arithmetic average of the two middle companies is substituted.]

INDUSTRY	PROFITABILITY					GROWTH					
	Return on equity ¹		1987			Sales ⁴		Earnings per share			
	5-year rank	5-year average 1983-87	Latest 12 months 1987	Debt as per cent of equity ²	Net profit margin ³	5-year rank	5-year average 1983-87	Latest 12 months 1987	5-year rank	5-year average 1983-87	Latest 12 months 1987
All-industry medians	(x)	12.8	13.6	48.6	4.3	(x)	6.8	8.3	(x)	5.3	13.9
Beverage and tobacco.....	1	20.5	19.4	32.2	7.4	11	8.2	8.9	2	12.9	12.8
Communications media.....	2	19.1	17.8	49.8	5.9	5	11.5	9.8	2	12.9	9.5
Financial services.....	3	18.7	17.2	71.4	4.7	1	17.1	10.1	8	9.5	5.9
Industrial, office services.....	4	18.1	15.2	29.2	4.3	4	11.8	12.9	3	12.2	6.8
Health.....	5	17.5	20.0	36.0	7.7	8	10.8	12.0	7	10.0	14.2
Electrical equipment.....	6	16.3	16.9	13.0	6.9	23	5.6	4.6	12	7.5	15.6
Food processors.....	7	16.3	16.0	52.7	3.5	18	6.3	10.2	11	8.0	16.8
Retailing.....	8	16.1	14.0	52.5	2.7	3	13.6	10.1	5	11.8	14.6
Food distributors.....	9	16.1	14.9	74.0	1.5	10	9.4	7.7	10	8.2	8.9
Electric utilities.....	10	14.4	13.6	96.4	12.3	21	5.8	4	16	5.3	1.9
Banks and thrifts.....	11	14.4	9.8	43.8	5.1	6	11.4	4.2	6	11.1	-24.6
Telecommunications.....	12	13.8	13.2	63.0	8.4	22	5.8	1.9	19	2.8	3.4
Aerospace and defense.....	13	13.8	12.8	28.0	3.9	17	6.5	1.8	13	6.1	11.6
Consumer products.....	14	13.4	14.7	39.5	3.9	12	7.7	12.6	14	5.8	13.9
Natural gas.....	15	12.9	10.2	85.5	5.3	26	3.8	-8.5	24	-5	.1
Apparel, shoes and textiles.....	16	12.8	13.5	35.5	3.5	15	7.0	9.3	26	-3.6	15.1
Insurance.....	17	12.6	15.9	17.0	6.5	2	14.4	12.5	4	12.0	16.9
Packaging.....	18	11.6	14.3	48.6	4.3	13	7.7	13.7	9	8.8	53.7
Computers and electronics.....	19	11.3	11.4	26.4	4.2	7	11.2	13.0	20	1.1	19.0
Conglomerates.....	20	11.1	14.7	52.1	5.6	27	3.8	5	22	.3	20.1
Paper.....	21	10.9	15.0	50.8	6.2	19	8.1	16.0	15	5.7	8.3
Chemicals.....	22	10.6	14.4	41.4	5.3	28	2.1	8.4	27	-7.3	38.8
Automotive.....	23	10.5	10.8	39.1	3.4	14	7.5	8.7	17	3.5	23.6
Leisure and recreation.....	24	10.4	11.0	59.9	4.8	20	8.0	13.6	21	1.0	.1
Construction.....	25	10.3	11.1	45.3	3.7	24	4.9	7.2	23	-1	26.2
Surface transportation.....	26	9.3	9.3	67.0	3.2	16	6.8	3.9	25	-3.1	-19.7
Air transport.....	27	7.3	4.1	64.0	1.9	9	10.8	19.2	18	2.8	30.5
Oil.....	28	6.8	3.3	61.0	1.2	31	-5.6	-10.4	28	(NS)	-53.5
Heavy equipment.....	29	5.6	6.1	38.2	2.0	30	-2	.9	28	(NS)	1.4
Coal.....	30	4.5	5.6	62.6	4.8	25	4.0	-.2	28	(NS)	20.3
Metals.....	31	(5)	2.9	40.0	2.2	29	.1	6.3	28	(NS)	17.3

NS Not significant. X Not applicable. ¹Represents net income divided by common shareholders' equity. Common shareholders' equity is total shareholders' equity including the stated value of all preferred stock at the beginning of each year minus the involuntary liquidating value of non-convertible preferred shares. ²Long-term debt, including capitalized leases, divided by total equity, including preferred equity. ³Net income divided by net sales, including other operating income. ⁴Net sales plus other operating revenue. ⁵Deficit.

Source: Forbes, Inc., New York, NY, *Forbes Annual Report on American Industry*. (Copyright.)

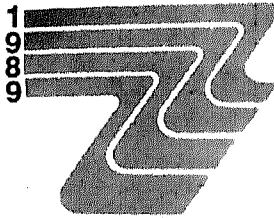
NO. 895. CORPORATE FUNDS—SOURCES AND USES: 1970 TO 1987

[In billions of dollars, except percent. Covers nonfarm nonfinancial corporate business. See text, section 17]

SOURCE AND USE	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Sources, total	102.2	158.4	345.9	383.3	327.5	432.3	518.5	492.3	491.3	484.1
Internal.....	62.8	124.8	200.1	239.5	242.3	285.7	336.3	355.4	361.5	347.2
Domestic undistributed profits.....	7.6	36.4	53.7	50.2	11.6	22.2	41.8	23.4	7.5	9.9
IVA and CCA ¹	-1.6	-17.9	-59.2	-38.0	-18.7	5.1	25.1	50.3	49.9	29.0
Capital consumption allowances.....	49.8	91.9	171.3	198.8	221.4	228.2	238.4	251.2	262.8	274.3
Foreign earnings ²	6.9	14.4	34.4	28.5	28.1	30.2	30.9	30.5	31.2	34.0
External ³	39.5	33.6	145.8	143.9	85.1	146.6	182.2	136.9	139.9	136.9
Percent of total	38.6	21.2	42.2	37.5	26.0	33.9	35.1	27.8	28.5	28.3
Credit market funds.....	34.2	27.1	92.7	94.5	80.4	88.6	121.6	85.2	109.5	77.4
Securities and mortgages.....	26.3	38.5	53.1	22.8	44.0	57.3	-7.5	15.3	33.3	24.3
Equity issues.....	5.7	9.9	12.9	-11.5	11.4	28.3	-74.5	-81.5	-80.8	-76.5
Bonds and mortgages ⁴	20.6	28.6	40.3	34.2	32.6	29.0	67.0	96.8	114.1	100.8
Loans and short-term paper.....	7.8	-11.5	39.5	71.7	36.4	31.3	129.0	69.9	76.1	53.2
Other	5.3	6.5	53.2	49.3	4.7	58.0	60.7	51.7	30.4	59.5
Profit taxes payable.....	-3.7	-2.4	-1.7	-6.8	-14.1	5.8	.7	-1.8	1.0	1.0
Trade debt.....	7.5	6.3	39.6	30.8	5.0	40.8	34.4	33.0	3.0	18.6
Foreign direct investments in U.S.	1.5	2.6	15.3	25.3	13.8	11.5	25.6	20.5	26.4	39.9
Uses, total	97.8	153.4	352.1	368.6	303.5	399.8	488.0	442.4	439.8	452.3
Capital expenditures	79.2	112.3	243.7	286.5	256.5	274.7	370.9	342.8	339.2	361.5
Increase in financial assets.....	18.7	41.1	108.4	82.0	47.0	125.1	117.1	99.7	100.6	90.8
Discrepancy (sources less uses)	4.3	5.0	-6.2	14.8	24.0	32.5	30.5	49.9	51.5	31.9

¹Inventory valuation and capital consumption adjustment. ²Foreign branch profits, dividends, and subsidiaries earnings retained abroad. ³Net increases in liability. ⁴Includes industrial pollution control revenue bonds, issued by State and local governments.

Source: Board of Governors of the Federal Reserve System. Data derived from *Flow of Funds Accounts*, annual.



Section 18

Communications

This section presents statistics on the usage, finances, and operations of the Postal Service and of the various communications media: Telephone, telegraph, radio, television, newspapers and periodicals. Expenditures data for advertising in the media are also included.

Postal Service.—The Postal Service provides mail processing and delivery services within the United States. The Postal Reorganization Act of 1970 created the Postal Service, effective July 1971, as an independent establishment of the Federal Executive Branch; it also placed restrictions on the private delivery of mail.

"Revenue and cost analysis" is the term used by the Postal Service to describe its system of attributing revenues and costs to classes of mail and service. This system draws primarily upon probability sampling techniques to develop estimates of revenues, volumes, and weights, as well as costs by class of mail and special service. The costs attributed to classes of mail and special services are primarily incremental costs which vary in response to changes in volume; they account for roughly 60 percent of the total costs of the Postal Service. The balance represents "institutional costs" which includes funds for research and development, portions of personnel and office supplies, etc. Statistics on revenues, volume of mail, and distribution of expenditures are presented in the Postal Service's annual report, *Cost and Revenue Analysis*, and its *Annual Report of the Postmaster General*.

Communication media.—The Federal Communications Commission (FCC), established in 1934, regulates wire and radio communications and licenses radio and television stations. Only the largest carriers and controlling companies file annual or monthly financial reports. Jurisdiction of the FCC applies to domestic and overseas telegraph carriers and to the Communications Satellite Corporation (Comsat), but not to a large number of telephone carriers that are engaged in intrastate service. The gross operating revenues of the telephone carriers reporting annually to the FCC, however, are estimated to cover about 90 percent of the revenues of all U.S. telephone companies.

Reports filed by the broadcasting industry cover substantially all radio and television stations operating in the United States and its outlying areas. The private radio services represent the largest and most diverse group of licensees regulated by the FCC. These services provide voice, data communications, point-to-point and point-to-multipoint communications to satisfy the requirements of individuals and American industry for land mobile and microwave communications. Major users of these services are: small business; the aviation industry; the maritime trades; the land transportation industry; manufacturing industries; state and local public safety and governmental authorities; emergency medical service providers; amateur radio operators and personal radio operations (CB and the General Mobile Radio Service). The FCC also licenses entities as "private carriers". Private carriers provide land mobile communications service and paging service on a for-profit basis. Principal sources of wire, radio, and television data are the FCC's *Annual Report*, and its annual *Statistics of Communications Common Carriers*.

Statistics on the printed media are available from the U.S. Bureau of the Census, as well as from various private agencies. The censuses of manufactures (conducted by the Census Bureau every five years, for the years ending in "2" and "7") provide statistics on the number and circulation of newspapers and periodicals and on sales of books and pamphlets. Editor & Publisher Co., New York, presents annual data on the number and circulation of daily and Sunday newspapers in its *International Year Book*. Monthly data on new books and new editions appear in *Publishers Weekly*, issued by R. R. Bowker Company, New York. (See table 382 for annual data.)

Advertising.—The statistics on advertising expenditures are compiled primarily by private organizations. McCann-Erickson, Inc., which compiles certain of the data shown (see tables 918-920), defines national advertising as the advertising done for companies whose products are distributed nationally, and for which national media rates are paid. Local advertising is defined as the advertising done for companies which market their products locally and which may pay special "local" media rates. Spot advertising is considered time bought by a national advertiser on a selective market basis. Monthly index figures of advertising in certain media are also published periodically by McCann-Erickson in *Advertising Age*.

The Broadcast Advertisers Reports (see tables 922-924) distinguished between spot and local advertising primarily on the basis of the type of advertiser to whom the time is sold, rather than how and by whom it is sold. In general, time purchased on behalf of retail or service establishments in

the market is considered local, even though the establishments may be part of a national or regional chain. That is, spot advertising promotes a product, while local advertising promotes a given establishment. Network advertising, mutually exclusive of spot and local, is broadcast through the network system.

Statistical reliability.—For a discussion of statistical collection and estimation, sampling procedures, and measures of statistical reliability applicable to Census Bureau data, see Appendix III.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

No. 896. U.S. POSTAL SERVICE—SUMMARY: 1975 TO 1987

[Employees in thousands; revenue and expenditures in millions of dollars, except as indicated. For fiscal years; see text, section 9. Includes Puerto Rico and all outlying areas except Canal Zone. See text, section 18]

ITEM	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
Employees, total	702	663	667	670	675	679	702	744	785	791
Regular	559	534	536	544	547	547	561	586	608	633
Postmasters	30	28	29	29	29	28	28	27	27	26
Office supervisors and tech. personnel	37	36	36	37	38	39	45	46	49	54
Office clerks and mail handlers ¹	239	230	229	232	232	229	235	249	260	272
City carriers and vehicle drivers	167	160	160	164	165	166	171	179	187	196
Rural carriers	31	32	33	33	34	34	35	35	36	37
Other	65	49	49	49	49	51	47	48	47	49
Substitute (part-time)	143	129	130	126	128	132	141	159	179	158
Compensation and employee benefits (mil. dol.)	10,805	15,162	16,541	18,018	19,094	20,070	22,157	24,349	26,576	27,229
Avg. salary per employee (dol.) ²	15,392	22,869	24,799	26,893	28,283	29,565	31,562	32,727	32,581	34,424
Pieces of mail per employee, avg.	127	151	158	164	169	176	187	188	188	195
Total revenue³	11,590	17,999	19,106	20,781	23,628	24,699	26,474	28,956	31,021	32,297
Operating postal revenue	10,015	16,108	17,143	19,133	22,600	23,582	25,314	27,736	30,102	31,528
Stamps, postal cards, etc.	2,819	4,382	4,287	4,825	5,559	5,709	6,023	6,520	6,969	7,246
Second-class postage paid in money (pound rates) ⁴	284	755	881	911	996	991	1,058	1,339	1,271	1,326
Other postage paid under permit and meter	6,241	10,062	10,828	11,891	13,984	14,755	16,067	17,747	19,294	20,280
Box rents	67	153	160	168	168	202	188	230	258	273
Miscellaneous	556	683	892	1,427	1,771	1,801	1,847	1,774	2,174	2,255
Money-order revenues	53	91	95	111	122	124	132	125	135	148
Government appropriations	1,533	1,720	1,610	1,275	707	789	879	970	716	650
Percent of total revenue	13.2	9.6	8.4	6.1	3.0	3.2	3.3	3.3	2.3	2.0
Investment income, net	37	173	353	373	321	328	292	250	203	119
Mail and service:										
First-class mail ⁵	5,798	9,733	10,146	11,457	13,747	14,255	15,216	16,740	18,035	18,788
Priority mail ⁶	411	561	612	758	823	849	928	960	1,011	1,086
Second-class publishers' mail ⁷	277	739	864	885	961	958	1,025	1,093	1,222	1,280
Third-class mail ⁸	1,348	2,216	2,412	2,643	3,803	3,677	4,241	4,887	5,606	6,148
Bulk rate	1,187	1,987	2,168	2,405	3,092	3,482	4,039	4,697	5,414	5,947
Single piece rate and fees	181	249	244	238	211	195	202	190	193	200
Fourth-class mail ⁹	718	747	805	786	788	753	774	783	814	823
Zone rate mail (parcels, catalogs, etc.)	577	484	500	499	507	500	519	524	550	563
Special fourth-class rate	130	237	272	251	237	206	210	198	213	203
Library rate and fees	11	17	33	36	44	47	45	40	51	57
Government mail ¹⁰	484	678	745	761	918	913	901	934	992	907
International mail ¹¹	390	550	596	735	882	874	859	882	934	957
Special services	251	506	518	823	866	868	918	970	1,030	
Express mail	(x)	(x)	184	270	339	422	490	544	491	499
Mailgrams	(x)	(x)	15	16	16	14	13	15	17	13
Other ¹²	1,913	2,120	2,205	1,847	1,028	1,118	1,159	1,220	919	769
Expenditures (mil. dol.)¹³	12,578	17,529	19,412	21,369	22,828	24,083	26,357	29,207	30,716	32,520
Number of post offices	30,754	30,449	30,326	30,244	30,155	29,990	29,750	29,557	29,344	29,319
Pieces of mail handled (est.) (bil.)	89.3	99.8	106.3	110.1	114.0	119.4	131.5	140.7	147.4	153.9
First-class, number (bil.) ⁸	51.4	58.0	60.3	61.5	62.3	64.3	68.4	72.4	76.2	78.9
Percent	57.6	58.1	56.7	55.8	54.5	53.8	52.0	51.7	51.7	51.3
Second class (bil.)	9.1	8.4	8.4	10.0	9.5	9.2	9.5	10.6	10.6	

X Not applicable. ¹Includes mobile unit employees. ²Includes fringe benefits. ³Net revenues after refunds of postage. Includes operating reimbursements, embossed envelope purchases, indemnity claims, and miscellaneous revenue and expenditure offsets. Shown in year which gave rise to the earnings. ⁴Includes controlled circulation publications. ⁵Items mailed at 1st-class rates and weighing 12 ounces or less. ⁶Items otherwise qualified as 1st-class or airmail that exceeds 12 ounces and 8 ounces, respectively. ⁷Includes other not shown separately. Includes mail paid at other than bulk rates. Publishers' mail includes printed publications periodically issued and mailed at known post office to paid subscribers, such as regular rate newspapers and magazines, and classroom and nonprofit rate publications. See source for further detail. ⁸Items less than 16 ounces in weight not mailed at either 1st- or 2d-class rates. ⁹Items not mailed at 1st-, 2d-, or 3d-class rates, except government and international mail. May include parcel post, catalogs weighing 16 ounces or more, books, films, and records. ¹⁰Penalty and franked. ¹¹Mail from U.S. to foreign countries paid at international mail rates. ¹²Consists of unassignable revenues; 1975 includes domestic airmail. ¹³Shown in year in which obligation was incurred.

Source: U.S. Postal Service, *Annual Report of the Postmaster General*.

NO. 897. U.S. POSTAL SERVICE—VOLUME OF MAIL, BY CLASS: 1970 TO 1987

[In millions, except per capita. For fiscal years; see text section 9. Includes Puerto Rico and all outlying areas except Canal Zone. For definition of classes of mail, see footnotes, table 898. See also *Historical Statistics, Colonial Times to 1970*, series R 172-186.]

CLASS OF MAIL	PIECES OF MAIL					WEIGHT OF MAIL (lb.)				
	1970	1975	1980	1985	1987	1970	1975	1980	1985	1987
Total.....	84,882	89,266	106,311	140,098	153,931	13,281	12,025	12,955	16,783	17,881
Domestic.....										
1st class and airmail ¹	83,986	88,334	105,348	139,269	153,153	13,055	11,824	12,742	16,564	17,865
Priority mail.....	50,174	52,482	60,332	72,517	78,933	1,636	1,746	2,213	2,807	3,047
2d class ²	185	207	248	308	354	371	440	591	672	763
3d class.....	9,914	9,713	10,221	10,380	10,324	3,641	3,024	3,478	3,966	4,012
4th class.....	19,974	21,867	30,381	52,170	59,734	2,032	2,283	3,240	6,453	7,155
Penalty.....	977	801	633	576	615	4,786	3,754	2,661	2,156	2,179
Franked and free for blind.....	2,544	2,928	2,992	2,608	2,645	540	527	503	470	453
218	336	540	710	548	49	50	56	40	56	
International.....										
896	932	963	829	778	226	201	216	219	216	
Per capita: ³										
Total, all domestic mail ⁴	411	411	464	585	632	64	55	56	70	73
1st class and airmail.....	245	244	286	304	326	8	8	10	12	13
2d class ²	49	45	45	44	43	18	14	15	17	17
3d class.....	98	102	134	219	247	10	11	14	27	30
4th class.....	5	4	3	2	3	23	17	12	9	9

¹ Beginning 1980, includes express mail established as a class of mail on October 9, 1977, and mailgrams. ² See footnote 8, table 896. ³ 1970 and 1980, based on April 1 population, including Armed Forces abroad; otherwise, based on estimated total population as of Jan. 1, including Armed Forces abroad. ⁴ Includes types of mail not shown separately.

Source: U.S. Postal Service, *Annual Report of the Postmaster General*.

NO. 898. U.S. POSTAL SERVICE RATES FOR LETTERS AND POST CARDS: 1958 TO 1988

[See also *Historical Statistics, Colonial Times to 1970*, series R 188-191]

DATE OF RATE CHANGE	SURFACE MAIL			Domestic airmail letters ¹	DATE OF RATE CHANGE	SURFACE MAIL			Domestic airmail letters	Express mail ²				
	Letters		Postal and post cards			Letters		Postal and post cards						
	Each ounce	First ounce				Each ounce	First ounce	Each added ounce						
1958 (Aug. 1)....	4¢	(X)	(X)	3¢	7¢	1975 (Dec. 31) ..	3 (X)	3 13¢	3 11¢	(4)				
1963 (Jan. 7)....	5¢	(X)	(X)	4¢	8¢	1978 (May 29) ...	(X)	15¢	13¢	(5)				
1968 (Jan. 7)....	6¢	(X)	(X)	5¢	10¢	1981 (Mar. 22) ...	(X)	18¢	17¢	(6)				
1971 (May 16)....	8¢	(X)	(X)	6¢	11¢	1981 (Nov. 1)....	(X)	20¢	17¢	\$0.35				
1974 (Mar. 2)....	10¢	(X)	(X)	8¢	13¢	1985 (Feb. 17)	(X)	22¢	17¢	\$0.75				
1975 (Sept. 14)....	(X)	10¢	9¢	7¢	(X)	1988 (Apr. 3)	(X)	25¢	20¢	\$0.75				
										\$1.20				

X Not applicable. ¹ Each ounce, except as noted. ² Post Office to addressee rates. Rates shown are for weights up to 2 pounds, all zones. Beginning Feb. 17, 1985, for weights between 2 and 5 lbs., \$12.85 is charged. Prior to Nov. 1, 1981, rate varied by weight and distances. Over 5 pounds still varies by distance. ³ As of October 1, 1975, surface mail service upgraded to level of airmail. ⁴ 17¢ for first ounce; 15¢ for each added ounce. ⁵ As of May 1, 1977, domestic airmail service, as a separate class of mail, was discontinued. ⁶ Letter rate up to eight ounces. ⁷ Over eight ounces and up to two pounds.

Source: U.S. Postal Service, "United States Domestic Postage Rates: Recent History," and unpublished data.

NO. 899. INTERNATIONAL AIR MAIL RATES FROM THE U.S.: 1961 TO 1988

[Excludes Canada and Mexico]

DATE OF RATE CHANGE	ZONE 1 ¹		ZONE 2 ²		ZONE 3 ³		Postal and post cards	Aero-grammes
	Each $\frac{1}{2}$ ounce up to two ounces	Each added $\frac{1}{2}$ ounce	Each $\frac{1}{2}$ ounce up to two ounces	Each added $\frac{1}{2}$ ounce	Each $\frac{1}{2}$ ounce up to two ounces	Each added $\frac{1}{2}$ ounce		
July 1, 1961.....	.13		.13	.15	.15	.25	.25	.11
May 1, 1967.....	.15		.15	.20	.20	.25	.25	.13
July 1, 1971.....	.17		.17	.21	.21	.21	.21	.13
Mar. 2, 1974.....	.21		.17	.26	.21	.26	.21	.18
Jan. 3, 1976.....	.25		.21	.31	.26	.31	.28	.22
Jan. 1, 1981.....	.35		.30	.40	.35	.40	.35	.30
Feb. 17, 1985.....	.39		.33	.44	.39	.44	.39	.36
In effect, April 17, 1988 ⁴.....	.45		.42	.45	.42	.46	.42	.36

¹ Caribbean, Central and South America. The airmail letter rate to South America, 1961 to 1967, was the same as that to Europe. Beginning January 3, 1976, the airmail letter rate to all South American countries except Colombia and Venezuela is the same as Europe; Colombia and Venezuela are included in the first zone. ² Europe and Mediterranean Africa. ³ Rest of world. ⁴ Up to 32 oz.; 30 cents per additional ounce over 32. ⁵ Up to 32 oz.; 35 cents per additional ounce over 32. ⁶ Up to 32 oz.; 33 cents per additional ounce over 32. ⁷ Up to 32 oz.; 39 cents per additional ounce over 32. ⁸ Air letters collapsed to a single schedule except for Canada and Mexico.

Source: U.S. Postal Service, unpublished data.

NO. 900. UTILIZATION OF SELECTED MEDIA: 1960 TO 1988

ITEM	Unit	1960	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988
Households with—												
Telephone service ¹	Percent..	78.5	87.0	(NA)	93.0	(NA)	(NA)	91.8	91.8	92.2	92.5	92.8
Radio sets ²	Percent..	96.3	88.6	98.6	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
Average number of sets	Number..	3.7	5.1	5.6	5.5	5.5	5.5	5.5	5.5	5.4	5.4	5.6
Television sets ³	Millions..	45.8	58.5	68.5	76.3	81.5	83.3	83.8	84.9	85.9	87.4	88.6
Television sets ³	Percent..	87	95	97	98	98	98	98	98	98	98	98
Color set households ³	Millions..	.3	20.9	46.9	63.4	71.4	73.9	75.8	77.7	80.1	82.7	85.0
Average viewing per day ⁴	Hours....	5.1	5.9	6.1	6.6	6.8	7.0	7.1	7.1	(NA)	7.2	7.1
Average number of sets ⁵	Number..	1.13	1.39	1.54	1.68	1.75	1.79	1.78	1.83	1.83	1.86	1.90
Cable TV ⁶	Percent..	(NA)	(NA)	(NA)	19.8	29.0	37.2	41.2	44.6	46.8	48.7	51.1
VCR's ⁷	Percent..	(NA)	(NA)	(NA)	1.1	3.1	5.5	10.6	20.8	36.0	48.7	58.1
Commercial radio stations: ²												
AM.....	Number..	3,539	4,323	4,463	4,589	4,668	4,733	4,754	4,863	4,902	(NA)	
FM.....	Number..	815	2,196	2,767	3,282	3,380	3,527	3,716	3,944	4,041	(NA)	
Television stations: ³ Total	Number..	559	862	953	1,011	1,065	1,106	1,138	1,182	1,235	1,290	1,382
Commercial.....	Number..	515	677	706	734	777	813	841	883	919	961	1,028
Cable television: ⁹												
Systems.....	Number..	640	2,490	3,506	4,225	4,825	5,600	6,200	6,844	7,600	7,800	8,500
Subscribers served.....	Millions..	.65	4.5	9.8	15.5	21.0	25.0	30.0	31.3	37.5	41.0	42.8
Daily newspaper circulation: ¹⁰	Number.....	58.9	62.1	60.7	62.2	62.5	62.6	63.1	62.3	62.7	62.8	(NA)
Per capita ¹¹	Number..	.327	.305	.282	.275	.269	.267	.267	.263	.260	.258	(NA)

⁻ Represents zero. ^{NA} Not available. ¹ For occupied housing units, 1960 through 1980, as of April 1; thereafter, as of March. Source: U.S. Bureau of the Census, *Census of Housing: 1960, 1970, and 1980*, vol. 1, and unpublished data. ² As of Dec. 31, except as noted. Source: Radio Advertising Bureau, New York, NY, *Radio Facts*, annual (copyright). Number of stations on the air compiled from Federal Communications Commission reports. ³ 1970-1975, as of Sept. of prior year; all other years as of Jan. of year shown. Source: 1960-1965, National Broadcasting Company, New York, NY, thereafter, Nielsen Media Research, Northbrook, IL, *Nielsen Report on Television* (copyright). ⁴ Calendar year data. Source: Nielsen Media Research, Northbrook, IL, *Nielsen Report on Television* (copyright). ⁵ 1970 and 1975, as of Sept; all other years, as of Jan. Excludes Alaska and Hawaii. Source: Television Bureau of Advertising, Inc., New York, NY, *Trends in Television*, annual. ⁶ As of February. Source: See footnote 4. ⁷ As of February. Excludes Alaska and Hawaii. Source: Nielsen Media Research, Northbrook, IL, *VCR Trends* (copyright). ⁸ As of February 1986. ⁹ As of Jan. 1. Source: Warren Publishing, Inc., Washington, DC, *Television and Cable Factbook*, annual (copyright). Number of television stations on the air. ¹⁰ As of Sept. 30, except 1960, as of Oct. 1. Source: Editor & Publisher Co., New York, NY, *Editor & Publisher International Year Book*, annual (copyright). ¹¹ Per capita based on total resident population enumerated as of April 1, 1970 and 1980, and estimated as of July 1 for other years.

Source: Compiled from sources mentioned in footnotes.

NO. 901. MULTIMEDIA AUDIENCES—SUMMARY: 1987

[In percent, except as indicated. As of spring. For persons 18 years old and over. Based on sample and subject to sampling error; see source for details]

ITEM	Total population (1,000)	Television prime time viewing and coverage	Television prime time viewing and coverage	Cable viewing and coverage	Radio listening and coverage	Newspaper reading and coverage
Total.....	174,900	91.5	77.1	45.1	86.2	85.7
18-24 years old.....	27,102	88.0	88.5	45.5	93.9	82.6
25-34 years old.....	42,405	90.2	75.8	47.5	93.7	86.2
35-44 years old.....	32,452	90.8	78.3	51.0	91.3	88.2
45-54 years old.....	22,858	91.9	77.6	45.5	87.3	87.4
55-64 years old.....	22,564	94.5	82.9	44.6	79.1	88.1
65 years old and over.....	27,519	94.9	80.8	33.9	66.2	81.7
Male.....	83,367	90.7	74.9	48.5	87.8	86.7
Female.....	91,533	92.2	79.0	41.9	84.8	84.8
White.....	151,131	91.0	76.4	47.6	86.3	87.1
Black.....	19,269	95.4	81.5	28.3	85.6	79.0
Other.....	4,500	93.2	80.0	32.9	85.5	67.5
Spanish speaking.....	8,000	91.9	77.5	37.7	87.6	76.3
College graduate.....	30,471	90.1	75.9	50.0	90.6	94.4
Attended college.....	31,585	90.1	74.4	53.1	90.7	91.3
High school graduate.....	68,438	92.1	78.4	45.3	87.9	87.2
Not high school graduate.....	44,406	92.5	77.6	35.6	77.5	73.9
Employed: Full-time.....	98,617	90.0	75.5	48.7	92.1	88.1
Part-time.....	11,089	90.9	74.0	51.4	90.4	90.2
Not employed.....	65,194	93.9	80.0	38.4	76.6	81.3
Household income:						
Less than \$10,000.....	18,847	91.1	74.5	27.2	71.3	67.9
\$10,000 to \$19,999.....	31,056	94.0	79.4	37.1	80.5	78.8
\$20,000 to \$29,999.....	33,219	91.3	78.8	43.3	86.7	87.8
\$30,000 to \$34,999.....	16,195	90.2	76.3	49.4	89.1	88.2
\$35,000 to \$39,999.....	14,891	91.6	76.9	51.5	89.6	89.1
\$40,000 to \$44,999.....	24,289	91.7	76.0	49.8	90.0	91.0
\$50,000 or more.....	36,603	90.1	75.8	54.7	93.1	92.7

Source: Mediemark Research Inc., New York, NY, *Multimedia Audiences*, Spring 1988. (Copyright.)

Equipment—Telephone and Telegraph Systems

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No. 902. COMMUNICATIONS EQUIPMENT—FACTORY SHIPMENTS: 1981 TO 1986

[In millions of dollars, except percent change. Minus sign (—) indicates decrease. N.e.c.=Not elsewhere classified]

ITEM	1981	1982	1983	1984	1985	1986	PERCENT CHANGE				
							1981-82	1982-83	1983-84	1984-85	1985-86
Shipments, total.....	23,795	27,702	30,676	35,288	41,032	43,030	16.4	10.7	15.0	16.3	4.6
Search, detection, navigation and guidance systems and equip. ¹	15,040	17,733	19,982	22,823	27,057	29,260	17.9	12.7	14.2	18.6	8.1
Radar systems and equipment.....	1,900	2,442	3,344	3,699	4,321	4,270	28.5	36.9	10.6	16.8	-1.2
Missiles-borne and space-vehicle-borne equipment.....	1,563	1,867	1,856	2,205	2,732	3,163	17.9	-6	18.8	23.9	15.8
Navigation systems and equip. ²	2,578	2,689	2,712	2,971	3,393	4.3	-9	1.2	8.3	14.2	
Counter measures equipment.....	1,004	1,284	1,598	2,037	2,682	3,297	27.9	24.3	27.6	31.7	22.9
Tracking radar.....	1,702	1,779	2,088	1,921	2,208	2,408	4.5	17.4	-12.8	21.3	9.1
Search, detection, identification, and tracking system n.e.c.	893	1,048	1,189	1,510	1,961	1,918	17.4	13.5	27.0	29.9	-2.2
Sonar search, detection and tracking systems and equipment.....	978	1,156	1,374	1,620	1,886	1,949	18.2	18.9	17.9	16.4	3.4
Specialized electronic and comm. intelligence equipment.....	1,051	1,346	1,349	1,370	1,810	1,855	28.1	-2	1.6	32.1	2.5
Commercial, industrial, and military communications equipment ¹	5,722	6,854	7,694	9,258	10,671	10,568	19.8	12.3	20.3	15.3	-1.0
Space satellite communications systems.....	1,095	1,614	1,760	2,277	2,281	1,946	47.4	9.0	29.4	.2	-14.7
Receivers, radio communications.....	1,086	1,290	1,391	1,678	1,953	2,264	16.8	7.8	20.6	16.4	15.9
Intercommunications systems ³	1,586	1,572	1,537	1,732	1,743	1,665	-9	-2.2	12.7	.6	-4.5
Broadcast studio and related electronic equipment ⁴	1,447	1,544	1,464	1,476	1,562	1,537	6.7	-5.2	.8	5.8	-1.6

¹ Includes shipments not shown separately. ² For aircraft, ship, and ground navigation. Represents autopilots, beacons, collision warning devices, direction finders equipment, etc. ³ Includes alarm systems and traffic control shipment. ⁴ Includes video, cable TV, and audio equipment.

Source: Electronic Industries Association, Washington, DC, *Electronic Market Data Book*, annual.

No. 903. TELEPHONE AND TELEGRAPH SYSTEMS: 1970 TO 1986

[Covers principal carriers filing annual reports with Federal Communications Commission. Minus sign (—) indicates loss. See *Historical Statistics, Colonial Times to 1970*, series R 46-70 and R 75-88, for data on telegraph systems]

ITEM	Unit	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986
Domestic telephone:											
Carriers ²	Number...	56	62	61	59	60	61	62	61	39	39
Telephones ³	Million...	105	130	153	157	158	151	(NA)	(NA)	100	103
Access lines.....	(NA) Million...	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	103	106
Miles of wire.....	Million...	628	872	1,081	1,131	1,188	1,223	1,260	1,290	1,313	1,338
Gross book cost of plant.....	Bill. dol....	59.9	95.5	134.9	147.4	161.5	174.0	184.2	183.0	195.1	207.4
Depreciation reserves ⁴	Bill. dol....	13.2	18.8	24.9	26.5	30.0	34.0	39.7	42.9	50.0	58.7
Ratio to book cost.....	Percent...	22.1	19.7	18.5	18.0	18.6	19.6	21.5	23.5	25.6	28.3
Capital stock and premium.....	Bill. dol....	16.4	21.6	28.8	31.3	34.5	38.8	43.4	46.9	48.1	41.5
Operating revenues.....	Bill. dol....	18.2	31.3	49.8	55.6	63.7	70.7	75.0	89.8	104.8	106.4
Operating expenses ⁵	Bill. dol....	11.7	20.2	33.0	37.3	42.8	49.1	50.9	74.7	78.6	79.0
Net operating income ⁶	Bill. dol....	3.1	5.6	8.9	10.0	11.4	11.4	12.4	12.4	13.4	13.9
Net income.....	Bill. dol....	3.1	3.6	6.0	6.6	7.5	7.3	7.6	8.5	9.5	10.4
Employees.....	1,000...	839	840	928	938	945	909	858	742	(NA)	(NA)
Compensation of employees.....	Bill. dol....	7.0	11.7	18.4	20.2	22.2	24.8	25.1	22.7	(NA)	(NA)
Overseas telephone:											
Number of overseas calls.....	Million...	23.4	62.2	168.3	199.6	265.5	310.8	369.5	427.6	411.7	477.6
Revenue from overseas calls.....	Mill. dol....	252	562	1,106	1,535	1,654	1,461	1,697	1,772	1,799	1,841
Ocean cable systems.....	Number...	17	21	22	24	24	24	26	26	26	26
Communications satellites ⁷	Number...	4	5	5	5	5	6	6	6	6	6
Domestic telegraph:											
Carriers.....	Number...	1	1	1	1	1	1	1	1	1	1
Revenue messages transmitted.....	Million...	70	42	55	55	56	50	42	39	35	23
Message revenues ⁸	Mill. dol....	234	197	271	296	320	320	316	321	304	273
Total operating revenues.....	Mill. dol....	402	605	636	697	779	809	722	738	715	573
Operating revenue deductions.....	Mill. dol....	368	435	561	603	669	726	654	712	654	601
Operating income ⁹	Mill. dol....	34	70	75	94	110	84	68	26	61	-28
Teltypewriter messages.....	Million...	46	54	59	68	63	(NA)	(NA)	(NA)	(NA)	(NA)
Overseas telegraph:											
Carriers.....	Number...	6	6	7	7	7	7	6	6	6	6
Revenue messages transmitted.....	Million...	32	26	21	20	18	15	11	9	7	6
Message revenues ⁸	Mill. dol....	124	217	355	380	405	411	395	411	404	402
Total operating revenues.....	Mill. dol....	194	316	497	535	578	613	616	644	652	633
Operating revenue deductions.....	Mill. dol....	156	245	362	405	468	532	560	611	638	642
Operating income ⁹	Mill. dol....	26	48	85	79	70	58	47	22	41	1.5
Return on investment:											
Telephone.....	Percent ...	7.1	7.6	8.5	8.7	9.0	8.4	8.7	9.2	9.4	9.4
Domestic telegraph.....	Percent ...	5.0	6.1	5.5	6.6	7.4	5.2	3.9	1.5	3.5	-2.1
Overseas telegraph.....	Percent ...	10.6	12.0	17.9	15.9	12.5	9.1	6.8	3.3	6.7	1.5

NA Not available. ¹ Includes Puerto Rico and Virgin Islands. Excludes intercompany duplications. Gross operating revenues of all carriers reporting since 1970 estimated at 90 percent of all carriers. ² Beginning 1985, number of carriers changed due to change in dollar requirement of reporting carriers from \$1,000,000 to \$100,000,000. ³ Includes company, service, and private.

⁴ Includes amortization reserves. ⁵ Excludes taxes. ⁶ After tax deductions. ⁷ Excludes contingency and retired satellites.

⁸ Includes telex service; for domestic telegraph, excludes TWX. ⁹ After Federal income taxes. ¹⁰ Excludes South American and most Caribbean operations of All America Cables and Radio, Inc. ¹¹ Ratio of net operating income (after taxes) to average net book cost of communications plant.

Source: U.S. Federal Communications Commission, *Statistics of Communications Common Carriers*, annual, and unpublished data.

Communications

NO. 904. TELEPHONE COMPANIES—SUMMARY: 1970 TO 1987

[As of Dec. 31 or calendar year, as applicable. See also *Historical Statistics, Colonial Times to 1970*, series R 31-45]

ITEM	UNIT	INDEPENDENT COMPANIES ¹						TOTAL ²			
		1970	1980	1984	1985	1986	1987	1984	1985	1986	1987
All companies	Number	1,841	1,483	1,416	1,402	1,380	1,360	1,440	1,426	1,404	1,384
Telephones	Millions	20.3	34.7	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Access lines	Millions	20.8	23.0	24.3	25.2	26.0	26.7	114.5	118.3	122.2	126.7
Total telephone plant	Mil. dol.	12,390	35,300	45,850	49,069	50,692	52,890	193,779	207,289	218,701	230,816
Operating revenues	Mil. dol.	2,953	10,475	16,000	17,245	18,469	19,820	73,868	78,425	82,366	84,900
Average daily conversations, total	Millions	109	192	210	223	243	301	1,199	1,264	1,327	1,662
Local calls	Millions	104	177	180	203	210	251	1,111	1,162	1,206	1,500
Toll calls	Millions	5	15	20	20	33	50	88	102	121	162
Reporting companies ³	Number	684	765	631	653	630	604	655	677	654	628
Telephones	Millions	19.2	33.7	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Access lines	Millions	(NA)	19.4	22.1	23.4	24.2	24.7	113.6	117.4	121.2	124.9
Telephone plant in service	Mil. dol.	11,175	32,491	42,093	45,501	47,732	48,335	186,151	199,978	212,366	222,260
Depreciation reserves	Mil. dol.	2,203	7,820	12,864	14,310	15,515	15,945	45,748	52,872	61,053	69,616
Operating revenues	Mil. dol.	2,791	10,177	15,403	16,684	17,555	17,266	73,270	77,864	81,452	82,246
Operating expenses ⁴	Mil. dol.	1,953	7,279	12,305	13,323	12,548	12,532	59,788	63,679	59,292	61,431
Net income	Mil. dol.	356	1,268	2,199	2,434	2,617	2,663	9,313	10,063	10,964	11,192
Common stock and surplus	Mil. dol.	3,733	9,623	12,781	13,940	14,033	15,083	63,147	66,510	66,603	69,413
Net income to common stock and surplus	Percent	9.5	13.2	17.2	17.5	18.7	18.0	14.7	15.1	16.5	16.1
Employees	1,000	142	189	168	170	165	152	724	695	672	663
Wages and salaries	Mil. dol.	1,001	3,373	4,429	4,558	4,736	4,643	22,112	21,443	22,127	22,125

NA Not available. ¹Companies independent of the Bell System, prior to divestiture of January 1984. ²All telephone companies. ³Comprises only companies submitting operating information to source cited below. ⁴Excludes Federal income tax.

Source: United States Telephone Association, Washington, DC, *Statistics of the Telephone Industry*, annual. (Copyright.)

NO. 905. REA AND RURAL TELEPHONE BANK PROGRAM—SUMMARY: 1970 TO 1987

ITEM	UNIT	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Loans and guarantees approved, Dec. 31: ¹											
Borrowers	Number	862	921	990	1,010	1,029	1,037	1,035	1,034	1,037	1,037
REA amount	Mil. dol.	1,816	2,576	3,845	4,076	4,327	4,540	4,742	4,937	5,119	5,342
Guaranteed amount	Mil. dol.	—	237	418	553	626	672	701	679	679	673
Rural Telephone Bank amount	Mil. dol.	—	618	1,388	1,529	1,726	1,872	2,000	2,131	2,249	2,403
Route miles of line, ² Dec. 31	1,000	547	653	798	805	831	847	866	872	889	877
Subscribers, Dec. 31	1,000	2,335	3,045	4,262	4,375	4,546	4,629	4,747	4,792	4,833	5,005
Telephones in service	1,000	2,989	4,355	6,770	6,953	7,147	(NA)	(NA)	(NA)	(NA)	(NA)
Total operating revenues	Mil. dol.	363	753	1,758	2,042	2,389	2,643	2,910	3,108	3,181	3,239
Total telephone plant	Mil. dol.	2,082	3,850	7,388	8,034	8,897	9,532	10,195	10,671	10,917	11,621
Employees	1,000	15.4	20.0	28.4	28.7	28.8	28.9	28.7	28.3	27.8	28.0

- Represents zero. NA Not available. ¹Cumulative net loans (cancellations deducted). ²Line in service.

Source: U.S. Rural Electrification Administration, *Statistical Report—Rural Telephone Borrowers*, annual.

NO. 906. PRIVATE RADIO STATIONS AUTHORIZED, BY CLASS: 1980 TO 1987

[In thousands. As of Sept. 30. Includes Puerto Rico and Virgin Islands. See also *Historical Statistics, Colonial Times to 1970*, series R 140-148.]

CLASS	1980	1985	1986	1987	CLASS	1980	1985	1986	1987
Private radio services ¹	16,357.3	2,419.5	2,573.7	2,657.1	Land transportation	28.0	37.7	39.8	40.0
Personal	14,560.2	(X)	459.4	470.4	Railroad	10.0	13.8	14.9	15.1
Citizens Band	14,308.4	(X)	—	—	Taxicab	4.8	6.1	6.2	6.0
General mobile	20.2	33.6	35.7	37.8	Interurban property	3.1	4.4	4.9	5.3
Radio control	231.7	(X)	—	—	Other	9.9	13.4	13.8	13.6
Amateur and disaster	389.9	415.4	423.7	432.6	Marine	398.3	525.3	561.2	573.7
Aviation	231.6	245.7	244.3	247.7	Ship	386.6	510.4	545.3	556.6
Aircraft	196.8	207.3	205.4	208.2	Alaskan	2.6	2.7	2.8	2.6
Aeronautical and fixed	9.5	10.9	11.1	11.2	Coastal and other	9.1	12.2	13.1	12.5
Civil air patrol	21.6	23.0	23.3	23.6	Public safety	137.1	194.5	207.1	212.6
Other	3.7	4.5	4.5	4.7	Police	42.3	42.3	45.0	46.1
Industrial	504.8	811.3	864.4	871.1	Fire	20.6	36.6	36.7	39.9
Power	23.1	34.4	37.7	40.5	Forestry conservation	7.6	9.6	10.2	10.3
Business	370.4	593.6	635.6	640.5	Highway maintenance	9.7	12.7	13.4	13.8
Petroleum	17.9	25.2	26.6	26.5	Special emergency	22.4	37.4	39.4	39.6
Forest products	6.4	9.8	10.6	10.9	Other	34.2	55.9	60.4	62.9
Special industrial	72.1	115.0	119.2	117.5	Operational fixed services ²	18.0	23.1	25.6	27.9
Other	14.7	33.4	34.7	35.1					

- Represents zero. X Not applicable. ¹Includes items not shown separately. Each license, construction permit, or combination construction permit and license is counted as one station; therefore, a station might include a transmitter and many mobile units. ²Includes microwave operations.

Source: U.S. Federal Communications Commission, *Annual Report*, and unpublished data.

No. 907. PUBLIC TELEVISION STATIONS: 1968 TO 1984

[Based on a "typical" broadcast week through 1972; calendar year data for 1974 and 1976; fiscal year data thereafter. General programming is directed at the general community. Instructional programming is directed at students in the classroom or otherwise in the general context of formal education]

ITEM	1968	1970	1972	1974	1976	1978	1980	1982	1984
Stations broadcasting.....	1,153	1,190	220	2,238	3,253	272	281	291	303
Total weekly broadcast hours.....	18,534	12,217	15,587	18,321	22,096	26,064	27,643	30,337	32,293
General programs.....	4,671	7,697	7,904	10,868	14,329	17,929	19,509	21,418	23,154
Percent of total hours.....	54.7	63.0	50.7	59.3	64.8	66.8	69.6	70.6	71.7
Instructional programs ⁴	3,863	4,520	7,683	7,453	7,766	8,135	8,135	8,919	9,139
Average weekly broadcast hours per station.....	56.1	65.3	70.9	80.7	90.9	95.8	99.8	104.3	106.6
General programming.....	30.7	41.1	36.0	47.9	59.0	65.9	69.4	73.6	76.4
Instructional programming ⁴	25.4	24.2	34.9	32.8	31.8	29.9	30.4	30.7	30.2

¹ 152 stations reported in 1968 and 187 in 1970; details include data for reporting stations only. ² Includes data for 227 stations only, representing 147 primary broadcasters; does not include secondary broadcasters. ³ Includes data for 243 stations only, representing 151 primary broadcasters. ⁴ Beginning 1974, includes material from Children's Television Workshops.

Source: Through 1970, National Instructional Television Center, Bloomington, IN, *One Week of Educational Television, 1970* (copyright); 1972, Corporation for Public Broadcasting, *One Week of Public TV*, April 1972, and unpublished data; 1974-1984, Corporation for Public Broadcasting, *PTV Programming Content by Category Report Series*, and unpublished data.

No. 908. PUBLIC BROADCASTING SYSTEMS—INCOME BY SOURCE: 1980 TO 1987

[In millions of dollars, except as indicated. Stations as of Dec. 31; fiscal year data for income. Includes nonbroadcast income]

NUMBER OF STATIONS AND INCOME SOURCE	1980	1982	1983	1984	1985	1986	1987, prel.	PERCENT DISTRIBUTION			
								1980	1985	1986	1987, prel.
Number of CPB-qualified public radio stations.....	217	255	266	275	288	295	299	(X)	(X)	(X)	(X)
Public television stations.....	290	299	300	304	317	322	323	(X)	(X)	(X)	(X)
Total income.....	704.9	845.2	899.2	974.2	1,096.3	1,134.0	1,294.0	100.0	100.0	100.0	100.0
Federal government.....	192.5	197.6	163.7	167.0	179.2	185.7	243.1	27.3	16.3	16.4	18.8
State and local government ¹	271.6	301.0	318.3	334.5	358.4	378.8	388.9	38.5	32.7	33.4	30.1
Subscribers and auction/marathon.....	102.3	162.5	196.4	215.2	247.7	268.5	297.2	14.5	22.6	23.7	23.0
Business and Industry.....	72.4	100.5	119.8	144.7	170.8	170.8	195.6	10.3	15.6	15.1	15.1
Foundation.....	23.5	22.1	24.9	27.8	43.0	38.3	48.0	3.3	3.9	3.4	3.7
Other.....	42.6	61.5	76.0	85.0	97.2	91.9	121.2	6.0	8.9	8.1	9.4

X Not applicable. ¹ Includes income received from State colleges and universities, and, beginning 1980 from other tax supported colleges and universities.

Source: Corporation for Public Broadcasting (CPB), Washington, DC, *Public Broadcasting Income, Fiscal Year, 1987*, and unpublished data.

No. 909. CABLE TELEVISION—SYSTEMS AND SUBSCRIBERS: 1952 TO 1988

[Subscribers in thousands, except percent. Estimated]

YEAR (As of Jan. 1)	Sys- tems	Sub- scribers	YEAR (As of Jan. 1)	Sys- tems	Sub- scribers	SUBSCRIBER SIZE-GROUP	Number of—1		Percent of—1	
							Systems	Sub- scribers	Systems	Sub- scribers
1952.....	70	14	1977.....	3,832	11,900	1988, total ²	7,731	41,491	100.00	100.00
1955.....	400	150	1978.....	3,875	13,000	50,000 and over.....	149	13,368	1.93	32.27
1960.....	640	650	1979.....	4,150	14,100	20,000-49,999.....	358	10,939	4.63	26.37
1965.....	1,325	1,275	1980.....	4,225	16,000	10,000-19,999.....	486	6,631	6.29	15.89
1969.....	2,260	3,600	1981.....	4,375	18,300	5,000-9,999.....	610	4,250	7.89	10.24
1970.....	2,490	4,500	1982.....	4,825	21,000	3,500-4,999.....	400	1,670	5.17	4.02
1971.....	2,639	5,300	1983.....	5,600	25,000	1,000-3,499.....	1,617	3,108	20.92	7.50
1972.....	2,841	6,000	1984.....	6,200	30,000	500-999.....	1,169	832	15.12	2.00
1973.....	2,991	7,300	1985.....	6,600	32,000	250-499.....	1,183	426	15.30	1.02
1974.....	3,158	8,700	1986.....	7,600	37,500	Less than 250.....	1,759	248	22.75	.59
1975.....	3,506	9,800	1987.....	7,900	41,100					
1976.....	3,681	10,800	1988.....	8,500	42,750					

¹ As of April 1, 1988. ² Excludes 682 systems not available by subscriber size-group.

Source: Warren Publishing, Inc., Washington, DC, *Television & Cable Factbook*, annual. (Copyright.)

NO. 910. CABLE AND PAY TV—SUMMARY, 1955 TO 1986, AND PROJECTIONS, 1990 AND 1995

[Cable TV for calendar year. Pay TV as of Dec. 31 of year shown]

YEAR	CABLE TV				PAY TV				
	Avg. basic subscribers (1,000)	Avg. monthly basic rate (dol.)	Revenue ¹ (mil. dol.)		Units ² (1,000)		Monthly rate (dol.)		Pay cable units per 1,000
			Total	Basic	Total pay ³	Pay cable	Total pay ³	Pay cable	
1955	250	5.00	20	20	(X)	(X)	(X)	(X)	(X)
1960	750	5.00	50	50	(X)	(X)	(X)	(X)	(X)
1965	1,500	5.00	95	95	(X)	(X)	(X)	(X)	(X)
1970	5,100	5.50	345	345	(X)	(X)	(X)	(X)	(X)
1975	9,800	6.50	804	774	469	469	(NA)	7.85	111
1976	11,000	6.75	972	901	1,021	978	(NA)	7.87	106
1977	12,200	7.00	1,163	1,034	1,738	1,642	8.12	7.92	122
1978	13,400	7.25	1,424	1,176	3,580	3,289	8.62	8.09	179
1979	15,000	7.50	1,814	1,362	6,408	5,732	9.37	8.44	223
1980	17,500	7.85	2,436	1,647	10,389	9,144	9.78	8.80	279
1981	21,500	8.14	3,460	2,091	17,521	15,450	10.13	9.02	376
1982	25,400	8.46	4,705	2,564	23,179	20,791	10.36	9.57	462
1983	29,450	8.76	6,160	3,096	28,115	26,418	10.25	9.84	473
1984	32,860	9.20	7,422	3,627	31,027	29,966	10.32	10.08	495
1985	35,430	10.24	8,666	4,353	31,056	30,596	10.53	10.42	473
1986	36,740	11.08	9,714	5,156	31,724	31,300	10.40	10.31	482
1990 proj.	50,210	16.94	15,298	10,204	(NA)	40,100	(NA)	9.50	485
1995 proj.	59,410	24.88	23,434	17,742	(NA)	49,100	(NA)	8.72	555

NA Not available. X Not applicable.

¹ Includes installation revenue.² Individual program services sold to subscribers.³ Includes multipoint distribution service (MDS) and satellite TV (STV).Source: Paul Kagan Associates, Inc., Carmel, CA, *The Cable TV Financial Databook*, annual. (Copyright.)NO. 911. RADIO AND TELEVISION STATIONS OWNED BY NEWSPAPERS AND/OR MAGAZINES:
1961 TO 1987

DATE	AM radio	FM radio	TV	DATE	AM radio	FM radio	TV	DATE	AM radio	FM radio	TV
1961, Sept. 1.....	412	147	161	1973, Dec. 1.....	304	211	179	1980, Dec. 1.....	315	264	230
1965, Oct. 31.....	391	170	174	1974, Dec. 1.....	321	236	193	1981, Dec. 1.....	311	277	246
1968, Dec. 4.....	381	191	183	1975, Dec. 1.....	320	238	197	1982, Dec. 1.....	300	283	251
1969, Dec. 1.....	394	245	189	1976, Dec. 1.....	322	238	209	1983, Dec. 1.....	288	257	248
1971, Feb. 1.....	402	248	191	1977, Dec. 1.....	314	238	211	1984, Dec. 1.....	268	256	255
1971, Dec. 1.....	318	209	178	1978, Dec. 1.....	319	252	221	1985, Dec. 1.....	264	255	253
1972, Dec. 1.....	325	171	178	1979, Dec. 1.....	318	257	226	1986, Dec. 1.....	232	228	271

Source: Broadcasting Publications Inc., Washington, DC, *Broadcasting Cablecasting Yearbook*. (Copyright.)

NO. 912. PUBLISHING INDUSTRY—SUMMARY: 1977 TO 1986

[In millions of dollars, except as noted. Number in parentheses represents Standard Industrial Classification code; see text, section 13. Based on the censuses of manufactures and the Annual Survey of Manufactures; for details, see source and Appendix III.]

ITEM	NEWSPAPERS (271)				PERIODICALS (272)				BOOKS (273)			
	1977	1982	1985	1986	1977	1982	1985	1986	1977	1982	1985	1986
Establishments	8,867	8,846	(NA)	(NA)	2,994	3,328	(NA)	(NA)	1,744	2,130	(NA)	(NA)
With 20 or more employees	2,147	2,555	(NA)	(NA)	525	680	(NA)	(NA)	348	420	(NA)	(NA)
Employees ¹ (1,000)	350	402	411	420	70	94	96	98	60	67	71	72
Payroll	4,306	6,555	7,905	8,381	1,020	1,986	2,555	2,711	830	1,327	1,672	1,776
Value of receipts	13,056	21,276	27,015	29,206	6,057	11,478	15,246	15,719	4,794	7,740	10,985	10,792
Cost of materials	3,539	6,006	6,585	7,024	2,285	4,588	5,580	5,558	1,544	2,420	3,021	3,100
Value added ²	9,519	15,275	20,426	22,169	3,783	6,911	9,678	10,196	3,262	5,292	7,396	7,758
New capital exp	478	1,029	1,430	1,296	79	195	340	274	80	174	232	203
Fixed assets, gross value	5,026	8,701	11,378	(NA)	725	1,370	2,052	(NA)	680	1,109	1,432	(NA)
Inventories, Dec. 31	382	755	834	784	350	724	818	784	992	1,380	1,895	1,882

NA Not available. ¹ Represents the average number of production workers plus the number of other employees in mid-March. ² By manufacture, derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments. This result is then adjusted by the addition of value added by merchandising operations, plus the net change in finished goods and work-in-process inventories between the beginning and the end of the year.Source: U.S. Bureau of the Census, *Census of Manufactures, 1982*, Industry Reports, series MC82-I-27A, and *1986 Annual Survey of Manufactures, M86(AS)-1*.

Newspapers and Periodicals—Circulation

549

NO. 913. NEWSPAPERS AND PERIODICALS—NUMBER, BY TYPE: 1965 TO 1988

[Data refer to year of compilation of the Directory cited as the source, i.e., generally to year preceding year shown. See also *Historical Statistics, Colonial Times to 1970*, series R 232-243]

TYPE	1965	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988
Newspapers ¹	11,383	11,383	11,400	9,620	9,183	9,205	9,151	9,134	9,144	9,031	10,088
Semaweekly.....	357	423	506	537	498	508	525	517	495	510	555
Weekly.....	8,989	8,903	8,824	7,159	6,806	6,855	6,798	6,811	6,857	6,760	7,438
Daily.....	1,843	1,838	1,744	1,740	1,735	1,711	1,701	1,651	1,646	1,745	
Periodicals ¹	8,990	9,573	9,657	10,236	10,688	10,952	10,809	11,090	11,328	11,593	11,229
Weekly.....	1,716	1,856	1,918	1,716	1,672	1,626	1,376	1,387	1,383	1,400	880
Semimonthly ²	550	589	537	645	689	724	656	801	789	858	819
Monthly.....	4,195	4,314	4,087	3,985	4,078	4,108	4,096	4,098	4,066	4,031	4,192
Bimonthly.....	876	957	1,009	1,114	1,237	1,307	1,348	1,361	1,387	1,402	1,558
Quarterly.....	1,030	1,108	1,093	1,444	1,554	1,627	1,711	1,759	1,895	1,984	2,245

¹ Includes other not shown separately.

² Includes fortnightly (every two weeks).

Source: Gale Research Inc., Ft. Lauderdale, FL, *Gale Directory of Publications, 1988*. (Copyright.)

NO. 914. NUMBER AND CIRCULATION OF DAILY AND SUNDAY NEWSPAPERS: 1965 TO 1987

[Number of newspapers as of the following dates: 1965, Jan. 1; 1970-1986, Feb. 1 of the following year. Circulation figures as of Sept. 30, except 1980 and 1985 as of Oct. 1. For English language newspapers only. See also *Historical Statistics, Colonial Times to 1970*, series R 224-231]

TYPE	1965	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
NUMBER OF NEWSPAPERS													
Daily: Total ¹	1,751	1,748	1,756	1,755	1,763	1,745	1,790	1,711	1,701	1,688	1,676	1,657	1,645
Morning.....	320	334	339	355	382	387	408	434	446	458	482	499	511
Evening.....	1,444	1,429	1,436	1,419	1,405	1,388	1,352	1,310	1,284	1,257	1,220	1,188	1,166
Sunday.....	582	586	639	696	720	736	755	768	772	783	798	802	820
CIRCULATION (mil.)													
Daily: Total ¹	60.4	62.1	60.7	62.0	62.2	62.2	61.4	62.5	62.6	63.1	62.8	62.5	62.8
Morning.....	24.1	25.9	25.5	27.7	28.6	29.4	30.6	33.2	33.8	35.4	36.4	37.4	39.1
Evening.....	36.3	36.2	35.2	34.3	33.6	32.8	30.9	29.3	28.8	27.7	26.4	25.1	23.7
Sunday.....	48.6	49.2	51.1	54.0	54.4	54.7	55.2	56.3	56.7	57.5	58.8	58.9	60.1

¹ All-day newspapers are counted in both morning and evening columns but only once in total. Circulation is divided equally between morning and evening.

Source: Editor & Publisher Co., New York, NY, *Editor & Publisher International Year Book*, annual. (Copyright.)

NO. 915. NUMBER AND CIRCULATION OF DAILY NEWSPAPERS, BY POPULATION-SIZE CLASS OF CITY: 1975 TO 1987

[Number of newspapers as of Feb. 1 of the following year. Circulation as of Sept. 30. For English language newspapers only. See table 38 for number of cities by population size]

TYPE OF DAILY AND POPULATION-SIZE CLASS	NUMBER ¹							NET PAID CIRCULATION ¹ (1,000)					
	1975	1980	1984	1985	1986	1987	1975	1980	1984	1985	1986	1987	
Morning dailies, total	339	387	458	482	499	511	25,491	29,413	35,424	36,361	37,441	39,123	
In cities of—													
1,000,001 or more.....	14	20	14	22	23	28	7,159	8,795	4,641	9,367	10,167	12,169	
500,001 to 1,000,000.....	25	27	24	24	27	25	5,581	5,705	6,609	6,897	7,331	5,915	
100,001 to 500,000.....	89	99	128	121	124	123	7,836	8,996	16,876	12,197	12,087	12,542	
50,001 to 100,000.....	69	75	83	87	88	92	2,619	2,973	3,402	3,653	3,701	3,946	
25,001 to 50,000.....	67	64	74	83	86	89	1,422	1,701	1,994	2,145	2,257	2,411	
Less than 25,000.....	75	102	135	145	151	157	1,243	1,897	2,099	1,897	2,099	2,141	
Evening dailies, total	1,436	1,388	1,257	1,220	1,188	1,166	35,166	32,788	27,657	26,407	25,061	23,702	
In cities of—													
1,000,001 or more.....	12	11	7	8	9	9	4,156	2,984	1,794	2,169	1,977	1,662	
500,001 to 1,000,000.....	24	23	15	14	14	14	4,573	4,101	1,949	1,626	1,628	1,636	
100,001 to 500,000.....	127	123	112	102	98	87	8,918	8,178	7,857	6,987	6,428	5,570	
50,001 to 100,000.....	175	156	133	127	122	112	5,379	4,896	4,177	3,942	3,767	3,499	
25,001 to 50,000.....	248	246	236	229	225	221	4,898	5,108	4,789	4,606	4,542	4,438	
Less than 25,000.....	850	829	754	740	720	722	7,242	7,523	7,087	7,075	6,719	6,890	

¹ All-day newspapers are counted in both morning and evening columns; circulation is divided equally between morning and evening.

Source: Editor & Publisher Co., New York, NY, *Editor & Publisher International Year Book*, annual. (Copyright.)

NO. 916. DAILY AND SUNDAY NEWSPAPERS—NUMBER AND CIRCULATION, BY STATE: 1987

[Number of newspapers as of Feb. 1 of the following year. Circulation figures as of Sept. 30. For English language newspapers only. New York, Massachusetts, and Virginia Sunday newspapers include national circulation]

STATE	DAILY		SUNDAY		STATE	DAILY		SUNDAY				
	Number	Circulation ¹		Number	Net paid circulation (1,000)		Number	Circulation ¹			Number	Net paid circulation (1,000)
		Net paid (1,000)	Per capita ²					Net paid (1,000)	Per capita ²			
Total.....	1,645	62,826	.26	820	60,112	Missouri.....	47	1,338	.26	19	1,311	
Alabama.....	27	754	.18	20	766	Montana.....	11	189	.23	7	187	
Alaska.....	8	129	.25	4	142	Nebraska.....	19	474	.30	10	439	
Arizona.....	19	704	.21	11	751	Nevada.....	7	263	.26	4	314	
Arkansas.....	32	532	.22	16	592	New Hampshire.....	9	219	.21	4	142	
California.....	118	6,395	.23	61	6,341	New Jersey.....	25	1,707	.22	20	1,933	
Colorado.....	26	945	.29	10	1,098	New Mexico.....	19	306	.20	13	276	
Connecticut.....	23	871	.27	11	824	New York.....	72	7,846	.44	35	5,848	
Delaware.....	3	144	.22	2	166	North Carolina.....	54	1,443	.23	29	1,353	
District of Columbia.....	2	853	1.37	1	1,097	North Dakota.....	10	189	.28	7	183	
Florida.....	48	2,985	.25	35	3,494	Ohio.....	87	2,815	.26	31	2,798	
Georgia.....	35	1,112	.18	17	1,228	Oklahoma.....	51	774	.24	42	891	
Hawaii.....	6	242	.22	5	258	Oregon.....	20	648	.24	10	651	
Idaho.....	12	205	.21	9	243	Pennsylvania.....	93	3,328	.28	25	2,946	
Illinois.....	70	2,699	.23	24	2,700	Rhode Island.....	7	298	.30	3	302	
Indiana.....	73	1,531	.28	20	1,316	South Carolina.....	17	649	.19	12	666	
Iowa.....	37	739	.26	11	752	South Dakota.....	12	169	.24	4	134	
Kansas.....	46	544	.22	18	494	Tennessee.....	28	978	.20	15	1,063	
Kentucky.....	24	663	.18	13	670	Texas.....	108	3,579	.21	96	4,398	
Louisiana.....	28	798	.18	22	899	Utah.....	6	280	.17	6	317	
Maine.....	9	291	.25	2	180	Vermont.....	8	126	.23	3	95	
Maryland.....	14	701	.15	6	849	Virginia.....	36	2,503	.42	15	842	
Massachusetts.....	45	2,103	.36	12	1,730	Washington.....	28	1,156	.25	15	1,139	
Michigan.....	52	2,565	.28	15	2,470	West Virginia.....	23	439	.23	10	392	
Minnesota.....	25	930	.22	12	1,066	Wisconsin.....	35	1,174	.24	14	1,078	
Mississippi.....	23	405	.15	12	308	Wyoming.....	10	97	.20	4	74	

¹ Circulation figures based on the principal community served by a newspaper which is not necessarily the same location as the publisher's office. ² Per capita based on total resident population estimated as of July 1, 1987.

Source: Editor & Publisher Co., New York, NY, *Editor & Publisher International Year Book*, annual (copyright).

NO. 917. COPYRIGHT REGISTRATION, BY SUBJECT MATTER: 1985 TO 1987

[In thousands. For years ending Sept. 30. Comprises claims to copyright registered for both U.S. and foreign works. See also *Historical Statistics, Colonial Times to 1970*, series W 82-95]

SUBJECT MATTER OF COPYRIGHT	1985	1986	1987	SUBJECT MATTER OF COPYRIGHT	1985	1986	1987
Total.....	539.8	561.0	582.2	Sound recordings.....	22.7	29.0	31.9
Monographs ¹	154.5	148.2	153.9	Renewals.....	43.8	45.3	45.5
Semiconductor chip products.....	.9	1.0	1.0	Musical works ²	147.9	156.3	161.6
Serials.....	120.0	130.0	131.0	Works of the visual arts ³	50.0	51.2	57.1

¹ Includes computer software and machine readable works. ² Includes dramatic works, accompanying music, choreography, pantomimes, motion pictures and filmstrips. ³ Two-dimensional works of fine and graphic art, including prints and art reproductions; sculptural works; technical drawings and models; photographs; commercial prints and labels; works of applied arts, cartographic works and multimedia works.

Source: The Library of Congress, *Annual Report*.

NO. 918. ADVERTISING—ESTIMATED EXPENDITURES: 1950 TO 1987

[In millions of dollars. See also *Historical Statistics, Colonial Times to 1970*, series T 444-446]

YEAR	Total	National	Local	YEAR	Total	National	Local	YEAR	Total	National	Local
1950.....	5,700	3,260	2,440	1973.....	24,980	13,700	11,280	1980.....	53,550	29,815	23,735
1955.....	9,150	5,380	3,770	1974.....	26,620	14,700	11,920	1981.....	60,430	33,890	26,540
1960.....	11,980	7,305	4,655	1975.....	27,900	15,200	12,700	1982.....	66,580	37,785	28,795
1965.....	15,250	9,340	5,910	1976.....	33,300	18,355	14,945	1983.....	75,850	42,525	33,325
1970.....	19,550	11,350	8,200	1977.....	37,440	20,595	16,845	1984.....	87,820	49,690	38,130
1971.....	20,700	11,755	8,945	1978.....	43,330	23,720	19,610	1985.....	94,750	53,355	41,385
1972.....	23,210	12,980	10,230	1979.....	46,780	26,695	22,065	1986.....	102,140	56,850	45,280
								1987.....	109,650	60,625	49,025

Source: McCann-Erickson, Inc., New York, NY. Compiled for Crain Communications, Inc. In *Advertising Age* (copyright).

No. 919. ADVERTISING—INDEXES OF NATIONAL ADVERTISING EXPENDITURES, BY MEDIUM:
1970 TO 1987

[1967=100. Based on the average monthly expenditure for those major media which give national coverage. See also *Historical Statistics, Colonial Times to 1970*, series T 472-484]

MEDIUM	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
General Index.....	112	143	236	269	298	332	368	413	481	498	521	539
Network television.....	114	158	273	316	353	381	422	478	572	554	573	584
Spot television.....	125	164	261	291	330	378	441	485	555	608	665	693
Magazines.....	104	118	209	236	253	284	298	340	396	414	427	450
Weeklies.....	95	94	178	204	218	245	255	294	342	353	357	376
Women's.....	107	130	238	259	277	302	321	374	429	459	488	502
Monthlies.....	120	155	246	280	304	347	368	404	480	501	517	559
Newspapers.....	105	131	182	209	232	267	290	323	364	386	399	413

Source: McCann-Erickson, Inc., New York, NY. Compiled for Crain Communications, Inc. In *Advertising Age* (copyright).

No. 920. ADVERTISING—ESTIMATED EXPENDITURES, BY MEDIUM: 1970 TO 1987

[In millions of dollars, except percent. See text, section 18 for a discussion of types of advertising. See also *Historical Statistics, Colonial Times to 1970*, series R 106-109, R 123-126, and T 444-471]

MEDIUM	EXPENDITURES								PERCENT			
	1970	1980	1982	1983	1984	1985	1986	1987	1970	1980	1985	1987
Total.....	19,550	53,550	66,500	75,850	87,820	94,750	102,140	109,650	100.0	100.0	100.0	100.0
National.....	11,350	29,815	37,785	42,525	49,690	53,355	58,850	60,625	58.1	55.7	56.3	55.3
Local.....	8,200	23,735	28,795	33,325	38,130	41,395	45,290	49,025	41.9	44.3	43.7	44.7
Newspapers.....	5,704	14,794	17,694	20,582	23,522	25,170	26,890	28,412	29.2	27.6	26.5	26.8
National.....	891	1,963	2,452	2,734	3,081	3,352	3,376	3,494	4.6	3.7	3.5	3.2
Local.....	4,813	12,631	15,242	17,848	20,441	21,818	23,614	25,918	24.6	24.0	23.0	23.6
Magazines.....	1,292	3,149	3,710	4,233	4,932	5,155	5,317	5,607	6.6	5.8	5.4	5.1
Weeklies.....	817	1,418	1,659	1,917	2,224	2,297	2,327	2,445	3.2	2.6	2.4	2.2
Women's.....	301	782	904	1,056	1,209	1,294	1,376	1,417	1.5	1.5	1.4	1.3
Monthlies.....	374	949	1,147	1,260	1,499	1,564	1,614	1,745	1.9	1.8	1.6	1.6
Farm publications.....	62	130	148	163	181	186	192	196	.3	.2	.2	.2
Television.....	3,596	11,469	14,636	16,759	19,848	21,022	22,881	23,904	18.4	21.4	22.2	21.8
Three networks.....	1,658	5,130	6,144	6,955	8,318	8,060	8,342	8,500	8.5	9.6	8.5	7.8
Cable networks.....	(NA)	45	181	282	458	594	676	760	(NA)	.1	.6	.7
Syndication.....	(national).....	(NA)	50	150	300	420	520	600	762	(NA)	.1	.7
Spot (national).....	1,234	3,269	4,364	4,827	5,488	6,004	6,570	6,846	6.3	6.1	6.3	6.2
Spot (local).....	704	2,967	3,765	4,345	5,084	5,714	6,514	6,833	3.6	5.5	6.0	6.2
Cable (non-network).....	(NA)	8	32	50	80	130	179	203	(NA)	(2)	1	2
Radio.....	1,308	3,702	4,870	5,210	5,817	6,490	6,949	7,206	6.7	6.9	6.9	6.6
Network.....	56	183	255	298	320	365	423	413	1.9	1.5	1.4	1.4
Spot.....	371	779	923	1,038	1,197	1,335	1,348	1,390	1.3	1.3	1.4	1.2
Local.....	881	2,740	3,492	3,876	4,300	4,790	5,178	5,463	4.5	5.1	5.1	5.0
Direct mail.....	2,766	7,596	10,319	11,795	13,800	15,500	17,145	19,111	14.1	14.2	16.4	17.4
Business papers.....	740	1,674	1,876	1,990	2,270	2,375	2,382	2,458	3.8	3.1	2.5	2.2
Outdoor.....	234	578	721	794	872	945	985	1,025	1.2	1.1	1.0	.9
Miscellaneous.....	3,848	10,458	12,806	14,324	16,578	17,807	19,299	20,731	19.7	19.5	18.9	18.9

NA Not available. Z Less than .05.

Source: McCann-Erickson, Inc., New York, NY. Compiled for Crain Communications, Inc. in *Advertising Age* (copyright). Percentages derived by U.S. Bureau of the Census.

No. 921. MAGAZINE ADVERTISING—EXPENDITURES, BY PRODUCT TYPE: 1970 TO 1987

[In millions of dollars, except percent. Space cost based on one-time rate; special rates used where applicable. Year-to-year data not strictly comparable, as a few minor publications are added or deleted]

TYPE OF PRODUCT	1970	1980	1982	1983	1984	1985	1986	1987	PERCENT DISTRIBUTION		
									1970	1980	1987
Expenditures.....	1,183	2,846	3,421	3,899	4,668	4,961	5,120	5,390	100.0	100.0	100.0
Apparel, footwear, and accessories.....	51	112	154	206	240	251	291	323	4.3	3.9	6.0
Automotive ¹	97	230	333	405	473	549	587	678	8.1	8.0	12.6
Bever, wine; and liquor.....	98	239	258	243	230	240	225	208	8.2	8.4	3.9
Computers, office equipment, stationery.....	32	79	141	194	321	250	219	247	2.7	2.8	4.6
Consumer services ²	74	190	233	329	411	463	484	491	6.2	6.7	9.1
Drugs and remedies.....	38	79	89	105	129	135	148	142	3.2	2.8	2.6
Food and food products.....	86	199	240	263	289	342	389	377	7.2	7.0	7.0
Household equipment and supplies.....	34	65	66	81	98	100	93	97	2.6	2.3	1.8
Household furnishings.....	38	73	81	94	94	87	103	111	3.2	2.0	2.1
Jewelry, optical goods, camera.....	30	79	80	95	107	101	113	121	2.5	2.8	2.2
Mail orders.....	(NA)	(NA)	(NA)	(NA)	292	328	363	407	(NA)	(NA)	7.6
Publishing and media.....	38	146	156	182	159	188	176	186	3.2	5.1	3.4
Retail.....	53	94	114	128	121	143	138	144	4.4	4.0	2.6
Smoking materials.....	65	290	358	398	423	383	322	334	5.4	10.2	6.2
Toiletries and toilet goods.....	119	206	241	279	334	385	390	455	10.0	7.2	8.4
Travel, hotels, and resorts.....	54	123	153	174	212	245	249	273	4.5	4.3	5.1
All other	289	736	838	891	728	793	815	802	24.2	25.9	14.9

NA Not available. ¹ Includes accessories and equipment. ² Includes business services.

Source: Publishers Information Bureau, Inc., New York, NY, as compiled by Leading National Advertisers.

Communications

No. 922. TELEVISION—EXPENDITURES FOR NETWORK ADVERTISING: 1980 TO 1987

[In millions of dollars. See text, section 18 for a definition of network advertising]

TYPE OF PRODUCT	1980	1985	1986	1987	TYPE OF PRODUCT	1980	1985	1986	1987
Expenditures	5,147	8,313	8,600	8,814	Horticulture.....	15	30	29	40
Apparel, footwear, and accessories.....	131	161	181	197	Household equipment, supplies, and furnishings.....	225	275	335	330
Automotive.....	529	848	927	1,029	Insurance.....	74	98	131	159
Bear and wine.....	242	428	535	514	Financial planning services.....	20	60	78	81
Building material, equipment, fixtures.....	59	97	88	90	Jewelry and cameras ¹	119	129	139	148
Computers, office equipment, and stationery.....	57	249	222	160	Laundry soaps, cleansers, and polishes.....	306	387	398	322
Confectionery, soft drinks.....	281	388	359	384	Movies.....	103	138	143	146
Consumer services.....	178	303	379	392	Pet products.....	144	175	157	161
Dept. and discount stores.....	94	161	139	97	Proprietary medicines.....	430	700	781	773
Food and food products.....	844	1,502	1,513	1,615	Publishing and media.....	34	50	49	39
Freight and industrial development.....	7	40	27	26	Restaurants and drive-ins.....	132	416	439	488
Gas, lubricants, etc.....	71	49	45	52	Tobacco products and supplies.....	8	6	1	1
Home electronics equipment.....	50	36	40	47	Toiletries and toilet goods.....	765	955	874	868
					Toys and sporting goods.....	93	152	138	126
					Travel, hotels, and resorts.....	72	102	113	125
					All other.....	64	367	359	394

¹ Includes optical goods.

Source: Television Bureau of Advertising, Inc., New York, NY. Data compiled by Broadcast Advertisers Reports, Inc., New York, NY.

No. 923. TELEVISION—ESTIMATED TIME CHARGES FOR SPOT ADVERTISING: 1980 TO 1987

[In millions of dollars. Data represent activity in the top 75 markets monitored by Broadcast Advertisers Reports, Inc. (BAR), currently covering approximately 329 stations. See text, section 18 for a definition of types of advertising]

TYPE OF PRODUCT	1980	1985	1986 ¹	1987 ¹	TYPE OF PRODUCT	1980	1985	1986 ¹	1987 ¹
Estimated time charges	2,496	4,504	4,929	5,131	Home electronics equipment.....	73	67	79	87
Agriculture and farming.....	15	17	24	23	Horticulture.....	35	37	38	50
Apparel, footwear, and accessories.....	105	95	64	61	Household equipment, supplies, and furnishings.....	133	217	200	187
Automotive.....	228	683	934	1,152	Insurance.....	34	88	118	118
Bear and wine.....	156	218	243	237	Jewelry, optical goods, and cameras.....	55	68	58	49
Building material, equipment, and fixtures.....	47	58	68	76	Laundry soaps, polishes.....	111	175	160	136
Computers, office equipment, and stationery.....	15	25	34	32	Pet products.....	33	60	55	51
Confectionery, soft drinks.....	212	355	376	373	Proprietary medicines.....	93	148	144	194
Consumer services.....	83	262	304	284	Publishing and media.....	78	147	167	159
Food and food products.....	507	927	877	987	Tobacco products, suppliers.....	8	14	15	8
Freight and industrial development.....	5	36	50	21	Toiletries and toilet goods.....	223	267	230	255
Gasoline, lubricants, etc.....	50	102	111	124	Toys and sporting goods.....	104	211	212	221
					Travel, hotels, and resorts.....	76	187	230	205
					All other.....	17	40	38	43

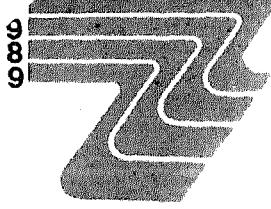
¹ Excludes National Syndicated activity; therefore, not completely comparable to prior years.

No. 924. TELEVISION—EXPENDITURES FOR RETAIL/LOCAL ADVERTISING: 1980 TO 1987

[In millions of dollars. See headnote, table 923]

TYPE OF PRODUCT	1980	1985	1986	1987	TYPE OF PRODUCT	1980	1985	1986	1987
Expenditures	1,983	3,899	4,445	4,677	Home building contractors				
Amusements, entertainment.....	68	121	128	121	building supplies.....	35	91	93	85
Appliance stores, repair.....	38	122	142	144	Hotels, resorts, U.S.	18	62	73	71
Auto repair, service stations.....	28	73	80	87	Financial planning services.....	7	29	34	36
Auto supply, accessory stores.....	12	41	39	45	Jewelry stores.....	19	25	27	23
Auto, truck dealers.....	99	311	339	371	Legal services.....	5	38	47	59
Banks, S&L associations.....	141	195	210	202	Leisure time stores and services.....	42	107	118	124
Builders, real estate.....	26	41	38	40	Loan, mortgage companies.....	12	25	24	23
Carpet, floor covering stores.....	24	40	44	52	Mail order, catalog showrooms.....	13	23	16	16
Clothing stores.....	46	82	112	116	Medical, dental services.....	13	87	114	130
Department stores.....	131	188	177	188	Movies.....	102	103	195	177
Discount department stores.....	74	115	113	123	Newspapers.....	15	32	33	38
Drug stores.....	26	67	78	79	Optical services, supplies.....	14	28	47	74
Education services.....	17	70	86	99	Political.....	70	22	161	25
Food stores, supermarkets.....	149	259	303	346	Radio, cable TV.....	69	134	147	153
Furniture stores.....	111	187	195	219	Religious services (non-auto).....	15	38	43	39
Gas, electric, water companies.....	16	38	42	46	Restaurants, drive-ins.....	288	672	745	800
Hardware stores.....	19	20	17	26	Shoe stores.....	27	37	43	47
Health clubs, reducing salons.....	21	39	42	52	Shopping centers, ass'tns.....	13	20	21	22
					Sport, hobby, toy stores.....	23	41	40	43
					All other.....	137	278	299	346

Source of tables 923 and 924: Television Bureau of Advertising, Inc., New York, NY. Data compiled by Broadcast Advertisers Reports, Inc., New York, NY in the top 75 markets.



Section 19

Energy

This section presents statistics on fuel resources, energy production and consumption, electric energy, hydroelectric power, nuclear power, solar energy, wood energy and the electric and gas utility industries. The principal sources are the U.S. Department of Energy's Energy Information Administration (EIA), the Edison Electric Institute, Washington, DC, and the American Gas Association, Arlington, VA. The Department of Energy was created in October 1977 and assumed and centralized the responsibilities of all or part of several agencies including the Federal Power Commission (FPC), the U.S. Bureau of Mines, the Federal Energy Administration, and the U.S. Energy Research and Development Administration. For additional data on transportation, see section 21; on fuels, see section 25; and on energy-related housing characteristics, see section 26.

The EIA, in its *Annual Energy Review*, provides statistics and trend data on energy supply, demand, and prices. Information is included on petroleum and natural gas, coal, electricity, hydroelectric power, nuclear power, solar, wood, and geothermal energy. Among its annual reports are *Annual Energy Review*, *Electric Power Annual*, *Natural Gas Annual*, *Petroleum Supply Annual*, *State Energy Data Report*, *Energy Price and Expenditure Report*, *Financial Statistics of Selected Electric Utilities*, *Historical Capital Costs and Annual Production Expenses*, *Residential Energy Consumption Survey*, *Performance Profiles of Major Energy Producers*, *Typical Electric Bills*, *Annual Energy Outlook*, and *International Energy Annual*. These various publications contain State, national, and international data on production of electricity, net summer capability of generating plants, fuels used in energy production, energy sales and consumption, hydroelectric power, construction costs and production expenses of power plants, and depreciation practices. The EIA also issues the *Monthly Energy Review*, which presents current supply, disposition, and price data, and separate weekly and monthly publications on petroleum, coal, natural gas, and electric power. Data on residential energy consumption, expenditures, and conservation activities are available from EIA's *Residential Energy Consumption Survey* and are published triennially in *Residential Energy Consumption Survey: Consumption and Expenditures*, and *Residential Energy Consumption Survey: Housing Characteristics*, and several other reports.

The Edison Electric Institute's monthly bulletin and annual *Statistical Year Book of the Electric Utility Industry for the Year* contain data on the distribution of electric energy by public utilities; information on the electric power supply, expansion of electric generating facilities, and the manufacture of heavy electric power equipment is presented in the annual *Year End Summary of the Electric Power Situation in the United States*. The American Gas Association, in its monthly and quarterly bulletins and its yearbook, *Gas Facts*, presents data on gas utilities, including sales, revenues, customers, prices, and other financial and operating statistics. A wide range of petroleum statistics are provided in the American Petroleum Institute publication *Basic Petroleum Data Book*.

Btu conversion factors.—Various energy sources are converted from original units (e.g., short tons, cubic feet, barrels, kilowatthours) to the thermal equivalent using British thermal units (Btu). A Btu is the amount of energy required to raise the temperature of 1 pound of water 1 degree Fahrenheit (F) at or near 39.2 degrees F. Factors are calculated annually from the latest final annual data available; some are revised as a result. The following list provides conversion factors used in 1986 for production and consumption, in that order, for various fuels: Petroleum, 5,800 and 5,418 mil. Btu per barrel; total coal, 21,913 and 21,462 mil. Btu per short ton; and natural gas (dry), 1,030 and 1,030 Btu per cubic foot. The factors for the production of nuclear power and geothermal power were 10,807 and 21,263 Btu per kilowatthour, respectively. The fossil fuel steam-electric power plant generation factor of 10,320 Btu per kilowatthour was used for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

NO. 925. TOTAL HORSEPOWER OF ALL PRIME MOVERS: 1950 TO 1987

[In millions, except percent. As of January, except as noted. Prior to 1960, excludes Alaska and Hawaii, except as noted. Prime movers are mechanical engines and turbines, and work animals, which originally convert fuels or force (as wind or falling water) into work and power. Electric motors, which obtain their power from prime movers, are excluded to avoid duplication. See also *Historical Statistics, Colonial Times to 1970*, series S 1-14.]

YEAR	Total horse- power	AUTOMOTIVE ^{1,2}			NONAUTOMOTIVE						
		Total	Per- cent of total	Total	Factories ³	Mines ³	Rail- roads ⁴	Mer- chant ships and sailing vessels	Farms	Electric cen- tral sta- tions ²	Air- craft ^{4,5}
1950	4,868	4,404	90.5	484	33	22	111	623	165	88	422
1955	7,158	6,632	82.7	526	36	31	60	524	212	139	426
1960	11,008	10,367	94.2	641	42	35	47	24	240	217	37
1965	15,098	14,306	94.8	790	48	40	44	24	272	307	55
1970	20,408	19,325	94.7	1,083	54	45	54	22	290	435	183
1973	24,262	23,029	94.9	1,233	58	46	57	20	308	562	182
1974	24,516	23,224	94.7	1,292	59	46	61	21	315	605	185
1975	25,100	23,752	94.6	1,348	60	47	62	22	318	654	185
1976	25,732	24,339	94.6	1,393	61	47	64	22	324	692	184
1977	26,469	25,025	94.5	1,444	62	47	62	23	328	729	194
1978	27,379	25,892	94.6	1,487	63	48	64	25	7,335	754	198
1979	28,162	26,617	94.5	1,545	63	48	62	26	342	803	201
1980	28,922	27,362	94.6	1,564	64	48	63	28	345	806	210
1981	29,507	27,909	94.6	1,589	64	48	65	29	345	836	212
1982	30,495	28,852	94.6	1,643	64	48	64	29	352	854	202
1983	31,337	29,662	94.7	1,675	64	47	62	29	356	877	240
1984	31,819	30,117	94.7	1,702	65	47	61	30	359	886	254
1985	32,529	30,792	94.7	1,737	65	47	58	29	358	912	268
1986	32,560	30,893	94.6	1,767	65	47	56	29	358	942	270
1987	33,266	31,488	94.7	1,778	65	47	53	29	357	958	269

¹ Includes passenger cars, trucks, buses, and motorcycles.

² As of July 1.

³ Beginning 1965, data are estimates.

⁴ Beginning 1985, not strictly comparable with earlier years.

⁵ Includes private planes and commercial airlines.

⁶ Includes Alaska and Hawaii.

⁷ Includes estimates of about 3.0 million hp in work animals and 30,000 in windmills.

Source: 1950 and 1955, The Twentieth Century Fund, New York, NY, J.F. Dewhurst and Associates, *America's Needs and Resources, A New Survey*, and John A. Waring, *Transactions of Canadian Sectional Meeting, World Power Conference, 1958*. Beginning 1960, John A. Waring, Arlington, VA, unpublished estimates.

NO. 926. ENERGY PRODUCTION AND CONSUMPTION, BY MAJOR SOURCE: 1960 TO 1987

[Btu = British thermal unit. For Btu conversion factors, see text, section 19. See also *Historical Statistics, Colonial Times to 1970*, series M 76-92.]

YEAR	Total pro- duction (quad. Btu)	PERCENT OF PRODUCTION				Total con- sumption (quad. Btu)	PERCENT OF CONSUMPTION				Consump- tion/ produc- tion ratio
		Coal	Petro- leum ¹	Natu- ral gas ²	Other ³		Coal	Petro- leum ¹	Natu- ral gas ²	Other ³	
1960	41.5	26.1	36.0	34.0	3.9	43.8	22.5	45.5	28.3	3.8	1.06
1961	42.0	24.9	36.2	34.9	4.0	44.5	21.6	45.5	29.1	3.8	1.06
1962	43.6	25.0	35.6	35.1	4.2	46.5	21.3	45.2	29.5	4.0	1.07
1963	45.9	25.8	34.8	35.4	4.0	48.3	21.5	44.9	29.8	3.7	1.05
1964	47.7	26.2	33.9	35.8	4.0	50.5	21.7	44.2	30.3	3.8	1.06
1965	49.3	26.5	33.5	35.8	4.3	52.7	22.0	44.1	29.9	4.0	1.07
1966	52.2	25.8	33.7	36.4	4.1	55.7	21.8	43.8	30.5	3.8	1.07
1967	55.0	25.1	33.9	36.5	4.4	57.6	20.7	43.9	31.2	4.2	1.05
1968	56.8	24.0	34.0	37.6	4.4	61.0	20.2	44.2	31.5	4.1	1.07
1969	59.1	23.5	33.1	38.7	4.8	64.2	19.3	44.1	32.2	4.4	1.08
1970	62.1	23.5	32.9	38.9	4.7	66.4	18.5	44.4	32.8	4.3	1.07
1971	61.3	21.5	32.7	40.5	5.3	67.9	17.1	45.0	33.1	4.8	1.11
1972	62.4	22.6	32.1	39.7	5.6	71.3	16.9	46.2	31.9	5.0	1.14
1973	62.1	22.5	31.4	39.9	6.2	74.3	17.5	46.9	30.3	5.3	1.20
1974	60.8	23.1	30.5	38.9	7.4	72.5	17.5	46.1	30.0	6.5	1.19
1975	59.9	25.0	29.6	36.8	8.6	70.5	17.9	46.4	28.3	7.4	1.18
1976	59.9	26.1	28.8	36.4	8.6	74.4	18.3	47.3	27.4	7.1	1.24
1977	60.2	26.2	29.0	36.4	8.5	76.3	18.2	48.7	26.1	7.0	1.27
1978	61.1	24.4	30.2	35.6	9.9	78.1	17.6	48.6	25.6	8.1	1.28
1979	63.8	27.5	28.4	35.0	9.1	78.9	19.1	47.1	26.2	7.7	1.24
1980	64.6	28.7	28.2	34.2	8.9	76.0	20.3	45.0	26.8	7.8	1.17
1981	64.4	28.5	28.2	34.2	9.1	74.0	21.5	43.2	26.9	8.4	1.15
1982	63.9	29.2	28.7	32.0	10.2	70.8	21.6	42.7	26.1	9.6	1.11
1983	61.2	28.2	30.1	30.6	11.2	70.5	22.6	42.8	24.6	10.2	1.15
1984	65.8	30.0	28.6	30.7	10.7	74.1	23.0	41.9	25.0	10.0	1.19
1985	64.8	29.8	29.3	29.6	11.3	74.0	23.6	41.8	24.1	10.4	1.14
1986	64.3	30.4	28.6	29.0	12.0	74.3	23.2	43.4	22.5	10.9	1.16
1987	64.6	31.2	27.3	29.5	12.0	76.0	23.7	42.9	22.6	10.8	1.18

¹ Production includes crude oil and lease condensate. Consumption includes domestically produced crude oil, natural gas liquids, and lease condensate, plus imported crude oil and products. ² Production includes natural gas liquids; consumption excludes natural gas liquids. ³ Comprised of hydropower, nuclear power, geothermal energy and other. ⁴ Represents peak year for U.S. energy production.

Source: U.S. Energy Information Administration, *Annual Energy Review*, and unpublished data.

Energy Supply and Disposition—Selected Energy Indicators

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No. 927. ENERGY SUPPLY AND DISPOSITION, BY TYPE OF FUEL: 1960 TO 1987

[In quadrillion British thermal units (Btu). For Btu conversion factors, see text, section 19]

TYPE OF FUEL	1980	1970	1973	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987, prel.
Production.....	41.5	62.1	62.1	59.9	63.8	64.8	64.4	63.9	61.2	65.8	64.8	64.3	64.6
Crude oil ²	14.9	20.4	19.5	17.7	18.1	18.2	18.1	18.3	18.4	18.9	19.0	18.4	17.6
Natural gas liquids.....	1.5	2.5	2.6	2.4	2.3	2.3	2.2	2.2	2.2	2.3	2.2	2.2	2.2
Natural gas ³	12.7	21.7	22.2	19.6	20.1	19.9	19.7	18.3	16.5	17.9	16.9	16.5	16.8
Coal.....	10.8	14.6	14.0	15.0	17.5	18.6	18.4	18.6	17.3	19.7	19.3	18.5	20.1
Nuclear power.....	(z)	.2	.9	1.9	2.8	2.7	3.0	3.1	3.2	3.5	4.2	4.5	4.9
Hydropower.....	1.6	2.6	2.9	3.2	2.9	2.8	3.3	3.5	3.3	3.9	3.0	2.6	2.6
Geothermal and other.....	(z)	(z)	(z)	.1	.1	.1	.1	.1	.1	.1	.2	.2	.2
Net trade ⁴	-2.7	-5.7	-12.7	-11.8	-16.4	-12.2	-9.6	-7.5	-8.3	-9.0	-7.9	-10.4	-11.5
Exports.....	1.5	2.7	2.1	2.4	2.9	3.7	4.3	4.8	3.7	3.8	4.2	4.1	3.9
Coal.....	1.0	1.9	1.4	1.8	1.8	2.4	2.9	2.8	2.0	2.2	2.4	2.2	2.1
Imports.....	4.2	8.4	14.7	14.1	19.6	16.0	14.0	12.1	12.0	12.8	12.1	14.4	15.4
Crude oil.....	2.2	2.8	6.9	8.7	13.8	11.2	9.3	7.4	7.1	7.3	6.8	8.0	10.0
Consumption.....	43.8	66.4	74.3	70.6	78.9	76.0	74.0	70.8	70.5	74.1	73.9	74.3	76.0
Petroleum products.....	19.9	29.5	34.8	32.7	37.1	34.2	31.9	30.2	30.1	31.1	30.8	32.2	32.6
Natural gas ³	12.4	21.8	22.5	19.9	20.7	20.4	19.9	18.5	17.4	18.5	17.8	16.7	17.2
Coal.....	9.8	12.3	13.0	12.7	15.0	15.4	15.9	15.3	15.9	17.1	17.5	17.3	18.0
Nuclear power.....	(z)	.2	.9	1.9	2.8	2.7	3.0	3.1	3.2	3.6	4.1	4.5	4.8
Hydropower ⁵	1.7	2.7	3.0	3.2	3.1	3.1	3.1	3.6	3.9	3.7	3.4	3.4	3.0
Geothermal and other.....	(z)	(z)	(z)	.1	.1	.1	.1	.1	.1	.2	.2	.2	.3

Z Less than .50 trillion. ¹ Represents peak year for U.S. energy production. ² Includes lease condensate, ³ Dry marketed gas. ⁴ Exports minus imports. ⁵ Represents peak year for U.S. energy consumption. ⁶ Includes industrial generation of hydropower and net electricity imports.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

No. 928. SELECTED ENERGY INDICATORS—SUMMARY: 1960 TO 1987

[Btu=British thermal unit. For Btu conversion factors, see text, section 19]

YEAR	ANNUAL AVERAGE PERCENT CHANGE ¹								PER CAPITA ⁵ (mil. Btu)		Con- sumption per dollar GNP ⁴ (1,000 Btu)	
	Energy production				Energy consumption				GNP ⁴	Energy pro- duction	Energy con- sumption	
	Total ²	Crude oil ³	Nat- ural gas	Coal	Total ²	Petro- leum prod- ucts	Nat- ural gas (dry)	Coal				
1960.....	1.4	.7	6.3	-2.6	2.4	2.9	6.6	-2.5	2.2	231	243	26.3
1965.....	3.5	2.0	4.5	3.8	3.8	3.1	4.9	3.3	4.6	255	272	25.2
1970.....	4.7	4.3	6.6	2.3	4.7	4.9	6.7	1.2	3.0	304	326	27.5
1971.....	-1.3	-1.8	2.8	-9.7	2.2	3.5	3.1	-5.4	2.8	286	328	27.3
1972.....	1.8	(z)	-3	6.9	5.0	7.8	1.0	4.1	5.0	298	340	27.3
1973.....	-6	-2.7	-1	-7	4.2	5.7	-8	7.4	5.2	294	351	27.1
1974.....	-2.0	-4.7	-4.4	.6	-2.3	-4.0	-3.5	-2.4	-5	285	340	26.6
1975.....	-1.6	-4.5	-7.4	6.5	-2.8	-2.2	-8.2	(z)	-1.3	278	327	26.2
1976.....	-1	-2.7	-8	4.4	5.4	7.5	2.0	7.3	4.9	275	342	26.3
1977.....	.5	1.1	.5	6	2.6	5.5	-2.1	2.5	4.7	274	347	25.8
1978.....	1.5	5.6	-4	-5.4	2.4	2.3	4	-1.1	5.3	275	352	25.1
1979.....	4.4	-1.8	3.0	17.6	1.0	-2.2	3.3	9.3	2.5	284	351	24.7
1980.....	1.5	.8	-.9	6.0	-3.7	-7.9	-1.3	2.5	-2	285	335	23.8
1981.....	-5	-6	-1.1	-1.2	-2.6	-6.6	-2.3	3.1	1.9	281	322	22.8
1982.....	-.8	.9	-7.4	1.4	-4.3	-5.3	-7.1	-3.7	2.5	275	305	22.4
1983.....	-4.2	.5	-9.4	-7.5	-.5	-6	-6.2	3.8	3.6	261	301	21.5
1984.....	7.6	2.5	6.5	14.3	5.1	3.3	6.6	7.4	6.8	278	313	21.2
1985.....	-1.6	.7	-5.7	-2.0	-2	-4	-3.7	2.4	3.4	271	310	20.5
1986.....	-.8	-3.2	-2.6	.9	4.4	4.1	-6.3	-1.3	2.8	266	308	20.0
1987.....	.5	-4.3	2.2	3.1	2.4	1.3	2.8	4.3	3.4	265	312	19.9

Z Less than .05 percent. ¹ Represents annual average for period of intervals shown; for 1960, change from 1955. Percent change derived from Btu values. Minus sign indicates decrease. For explanation of average annual percent change, see Guide to Tabular Presentation. ² Includes types of fuel or power not shown separately. ³ Includes lease condensate. ⁴ Gross national product in constant (1982) dollars, see table 685. ⁵ Based on resident population estimated as of July 1.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

Energy

NO. 929. ENERGY CONSUMPTION—END-USE SECTOR AND SELECTED SOURCE, BY STATE: 1986

[In trillions of Btu, except as indicated. For Btu conversion factors, see text, section 19. For composition of regions, see fig. I, inside front cover]

REGION, DIVISION, AND STATE	Total ¹	Per cap- ita ² (mil. Btu)	Percent change, 1985- 1986	END-USE SECTOR				SOURCE				
				Resi- dential	Com- mercial	Indus- trial	Trans- portation	Petro- leum	Natu- ral gas (dry)	Coal	Hydro- power	Nu- clear power
U.S.	74,255	308	.3	15,279	11,729	26,471	20,777	32,198	16,718	17,245	3,405	4,475
Region:												
Northeast	11,689	234	1.4	3,040	2,412	2,950	3,287	6,089	2,063	1,806	635	1,146
Midwest	18,509	312	-1.9	4,355	2,885	6,717	4,555	6,692	4,224	6,228	271	1,100
South	30,505	368	1.4	5,361	4,122	12,888	6,150	13,101	7,699	7,428	310	1,667
West	13,570	278	(z)	2,520	2,311	3,955	4,784	6,315	2,736	1,784	2,186	560
New England	2,838	233	3.4	815	585	585	852	1,856	318	157	157	317
Maine	329	281	7.1	78	46	104	101	219	3	9	58	67
New Hampshire	216	211	7.6	64	33	50	69	147	11	25	22	-
Vermont	115	213	.2	31	18	28	38	65	5	1	28	22
Massachusetts	1,279	219	3.1	373	287	230	388	853	191	100	41	26
Rhode Island	195	200	-4	59	42	38	56	113	27	1	(z)	-
Connecticut	704	221	1.9	210	159	135	200	459	81	21	8	202
Middle Atlantic	8,851	237	.8	2,225	1,827	2,365	2,435	4,233	1,745	1,649	478	829
New York	3,397	191	1.1	955	947	640	856	1,710	750	253	466	239
New Jersey	2,192	266	2.7	474	407	506	796	1,273	363	78	4-3	160
Pennsylvania	3,272	275	-9	796	473	1,219	784	1,250	632	1,318	15	430
East North Central	13,000	311	-1.9	3,082	1,979	4,952	3,008	4,415	3,084	4,551	48	714
Ohio	3,553	331	-9	805	535	1,430	784	1,108	750	1,432	2	(z)
Indiana	2,221	404	-3.0	413	238	1,019	551	796	398	1,148	5	-
Illinois	3,357	291	-4.1	830	617	1,190	720	1,161	944	787	1	461
Michigan	2,566	283	.2	672	390	889	635	890	689	812	15	132
Wisconsin	1,283	268	-4	342	199	424	318	460	282	371	25	121
West North Central	5,509	313	-1.9	1,293	906	1,765	1,547	2,277	1,160	1,677	223	366
Minnesota	1,219	289	-3	299	177	407	336	508	245	201	82	119
Iowa	894	314	-3.1	218	133	328	217	346	209	262	10	32
Missouri	1,431	283	-4.0	374	262	345	451	600	244	512	21	77
North Dakota	308	451	3.1	54	39	147	67	121	27	311	34	-
South Dakota	198	279	3.0	54	30	53	60	102	23	29	59	-
Nebraska	489	308	-1.8	121	108	117	142	197	104	110	17	83
Kansas	972	398	-3.4	173	156	370	274	403	308	252	(z)	75
South Atlantic	11,242	275	3.8	2,576	1,921	3,253	3,490	4,913	1,318	3,521	94	1,288
Delaware	214	338	3.7	40	27	88	59	126	34	66	-	-
Maryland	1,140	256	1.7	288	158	370	324	467	158	275	19	139
District of Columbia	172	275	4.7	35	73	31	33	46	30	1	-	-
Virginia	1,671	268	5.1	391	330	425	524	729	147	303	1	229
West Virginia	720	376	(z)	124	78	379	140	250	121	877	11	-
North Carolina	1,750	276	4.4	398	273	557	521	704	140	583	26	219
South Carolina	1,081	320	8.3	218	145	443	274	357	102	264	13	385
Georgia	1,828	300	9.3	383	268	554	622	757	287	693	22	78
Florida	2,656	228	4.1	699	559	406	993	1,477	299	459	2	238
East South Central	5,295	348	5.1	1,056	753	2,060	1,425	1,956	798	2,127	137	168
Kentucky	1,301	349	9.3	258	171	531	340	465	174	750	28	-
Tennessee	1,657	345	.5	361	274	557	465	578	194	607	55	4-1
Alabama	1,454	359	4.4	276	194	636	348	508	210	661	54	125
Mississippi	683	337	8.4	161	114	336	272	405	220	109	-	44
West South Central	13,968	520	-1.7	1,729	1,448	7,555	3,235	6,232	5,563	1,778	79	211
Arkansas	751	317	-1.6	154	96	292	209	319	203	225	29	66
Louisiana	3,229	718	1.1	291	253	2,045	640	1,359	1,486	172	-	115
Oklahoma	1,208	365	-9.3	233	176	473	326	419	571	218	30	-
Texas	8,780	526	-1.1	1,051	923	4,745	2,060	4,135	3,313	1,163	20	-
Mountain	3,938	302	-2.6	764	727	1,210	1,238	1,592	739	1,663	485	109
Montana	315	386	-9.2	57	45	131	82	137	41	123	112	-
Idaho	329	328	-5.3	74	62	112	81	108	35	9	125	-
Wyoming	346	683	(z)	37	35	210	65	118	79	337	12	-
Colorado	868	266	1.1	189	214	185	279	344	198	295	23	1
New Mexico	468	316	1.2	68	82	147	171	210	145	242	2	-
Arizona	839	266	2.4	173	175	190	301	336	105	296	149	108
Utah	478	288	-8.7	103	69	163	143	189	100	189	15	-
Nevada	295	305	-3.7	69	45	71	116	142	36	162	47	-
Pacific	9,632	270	1.1	1,756	1,584	2,745	3,546	4,723	1,987	121	1,701	451
Washington	1,655	371	-1.7	353	265	538	499	677	122	63	791	91
Oregon	801	296	.5	186	144	217	253	329	73	9	434	77
California	6,471	240	1.2	1,154	1,076	1,726	2,514	3,245	1,591	43	467	283
Alaska	474	590	3.1	42	76	206	151	245	208	12	8	-
Hawaii	231	217	-1.0	21	23	58	129	227	3	(z)	1	-

¹ Represents zero. ² Less than 500 billion or .05 percent. ³ Sources of energy include geothermal, wood and waste, and net interstate sales of electricity, including losses, not shown separately. ⁴ Based on estimated resident population as of July 1. ⁵ Includes -16.7 trillion Btu of net imports of coal coke not allocated by State. ⁶ Minus sign (-) indicates when amount of energy expended exceeds amount of energy consumed.

Source: U.S. Energy Information Administration, *State Energy Data Report, 1980-1986*.

No. 930. PRIMARY ENERGY CONSUMPTION BY END-USE SECTOR: 1960 TO 1987

[Btu=British thermal unit. For Btu conversion factors, see text, section 19. For residential and commercial, industrial, and transportation sectors, data represent only fossil fuels consumed directly]

YEAR	Total consumption (quad. Btu)	Residential and com- mer- cial (quad. Btu)	Indus- trial and mis- cel- laneous (quad. Btu)	Trans- portation (quad. Btu)	Elec- tricity gen- era- tion (quad. Btu)	PERCENT OF TOTAL			
						Resi- den- tial and com- mer- cial	Indus- trial and mis- cel- laneous	Trans- portation	Elec- tricity gen- era- tion
1960.....	43.8	8.8	16.3	10.6	8.2	20.0	37.1	24.1	18.7
1970.....	66.4	12.1	21.9	16.0	16.3	18.3	33.0	24.2	24.5
1973.....	74.3	12.3	23.6	18.5	19.9	15.5	31.7	25.0	26.7
1975.....	70.6	11.6	20.4	18.2	20.3	16.4	28.9	25.8	26.8
1978.....	78.1	11.9	21.9	20.6	23.7	15.2	28.0	26.3	30.4
1979.....	78.9	11.5	22.8	20.4	24.1	14.6	28.9	25.9	30.8
1980.....	76.0	10.7	21.0	19.7	24.5	14.1	27.7	25.9	32.3
1981.....	74.0	10.0	19.7	19.5	24.8	13.6	26.6	26.3	33.5
1982.....	70.8	10.1	17.4	19.0	24.3	14.2	24.6	26.9	34.2
1983.....	70.5	9.7	16.7	19.1	24.9	13.8	23.7	27.1	35.4
1984.....	74.1	10.1	18.2	19.8	25.9	13.6	24.5	26.8	35.0
1985.....	73.9	9.8	17.5	20.1	26.5	13.3	23.7	27.2	35.8
1986.....	74.3	9.6	17.3	20.7	26.7	12.9	23.2	27.9	35.9
1987, pref.....	76.0	9.6	17.7	21.1	27.6	12.7	23.3	27.8	36.3

Source: U.S. Energy Information Administration, *Annual Energy Review*.

No. 931. ENERGY CONSUMPTION, BY SECTOR AND PRIMARY SOURCE: 1987

[In trillions of Btu. For definition of Btu, see text, section 19]

SECTOR	Total ¹	Coal ²	Natural gas, dry	Petroleum ³	Hydro- electric ⁴	Nu- clear power	Other ⁵	Elec- tricity dis- tributed ⁶	Ele- ctric energy loss ⁷
End-use sectors.....	76,042	2,835	14,239	31,369	33	(X)	9	8,379	19,182
Residential and commercial.....	27,631	164	6,853	2,606	(X)	(X)	-	5,475	12,534
Industrial.....	27,251	2,671	6,873	8,157	33	(X)	9	2,891	6,618
Transportation.....	21,182	-	513	20,606	(X)	(X)	-	13	30
Electric utilities.....	27,559	15,188	2,941	1,257	3,009	4,920	245	(X)	(X)

¹ Represents zero. ² Not applicable. ³ Total may not equal sum of components due to independent rounding of the components. ⁴ Represents anthracite, bituminous coal, and lignite. ⁵ Includes petroleum products, still gas, liquefied refinery gas, and natural gas liquids. ⁶ Industrial sector is hydroelectrically produced by the industrial sector. Electric utilities sector includes net imports of electricity.

⁷ Includes net imports of electricity. ⁸ Industrial sector includes net imports of coal coker. Electric utilities sector includes electricity produced from geothermal, wood, waste, wind, solar thermal, and photovoltaic sources. ⁹ Electrical energy used by railroads, and for street and highway lighting, is included in transportation sector. ¹⁰ Losses allocated by final end-use sector in proportion to their direct kilowatt hour usage.

Source: U.S. Energy Information Administration, *Monthly Energy Review*, February 1988.

No. 932. ENERGY EXPENDITURES AND AVERAGE FUEL PRICES, BY SOURCE AND SECTOR: 1970 TO 1986

[For definition of Btu, see text, section 19. End-use sector and electric utilities exclude expenditures and prices on energy sources such as hydropower, solar, wind, and geothermal. Also excludes expenditures for reported amounts of energy consumed by the energy industry for production, transportation, and processing operations]

SOURCE AND SECTOR	1970	1973	1975	1979	1980	1981	1982	1983	1984	1985	1986
EXPENDITURES (mil. dol.)											
Total ^{1,2}	83,048	112,271	173,257	300,475	377,727	430,676	429,902	418,741	443,494	444,914	380,524
Natural gas.....	11,232	14,466	21,287	43,387	53,288	63,097	71,763	75,162	80,777	76,019	61,937
Petroleum products ³	48,217	65,426	104,103	184,434	240,008	266,761	243,994	221,299	226,751	224,278	173,154
Motor gasoline.....	31,596	39,667	59,490	96,008	124,418	138,124	130,463	115,816	114,438	118,044	91,491
Distillate fuel oil.....	6,254	9,524	15,681	32,856	40,800	48,202	44,118	41,074	44,038	42,947	32,479
Jet fuel.....	1,440	2,000	4,192	8,603	13,923	15,607	14,974	13,940	15,064	14,747	10,504
Residual fuel.....	2,047	4,667	10,378	17,655	21,573	22,667	17,631	14,097	14,379	11,470	7,494
Coal.....	4,593	6,229	13,047	20,421	22,648	26,231	26,427	27,051	29,050	29,719	27,814
Electricity sales.....	23,350	39,781	50,883	82,054	98,099	116,452	127,393	134,745	147,895	154,531	150,200
Residential sector.....	20,082	27,075	36,845	57,929	68,827	77,928	66,834	92,020	98,686	101,332	96,188
Commercial sector.....	10,699	15,105	22,836	38,755	46,883	55,369	61,245	64,764	69,981	71,621	68,092
Industrial sector.....	16,817	24,082	42,448	80,635	98,027	112,039	107,654	104,626	115,509	110,193	91,470
Transportation sector ²	35,490	46,009	71,129	123,156	163,990	185,340	174,168	157,331	159,357	161,828	124,816
Motor gasoline.....	30,525	36,598	58,036	94,105	121,819	135,380	128,105	113,843	112,044	115,201	89,372
Electric utilities.....	4,316	7,817	16,396	31,031	37,435	43,275	41,311	41,308	43,352	42,540	35,769
AVERAGE FUEL PRICES (dol. per mil. Btu)											
All sectors.....	1.06	1.97	2.16	5.13	4.55	5.24	5.31	5.10	5.02	4.89	3.91
Residential sector.....	2.12	2.73	3.83	6.05	7.55	8.93	9.92	10.81	11.15	11.42	10.92
Commercial sector.....	1.97	2.56	4.09	6.32	7.88	9.55	10.44	11.02	11.43	11.93	11.32
Industrial sector.....	.79	1.04	2.10	3.50	4.60	5.46	5.95	6.10	6.12	5.98	5.13
Transportation sector.....	2.32	2.58	4.04	6.21	8.62	9.85	9.45	8.46	8.25	8.27	6.16
Electric utilities.....	.32	.46	.96	1.48	1.75	2.00	2.01	1.97	1.97	1.85	1.55

¹ Includes electricity sales; excludes electricity generation. ² Includes sources or fuel types, not shown separately.

Source: U.S. Energy Information Administration, *State Energy Price and Expenditure Report*, annual.

Energy

No. 933. ENERGY EXPENDITURES—SOURCE AND END-USE SECTOR, BY STATE: 1986

[In millions of dollars, except per capita and percents. End-use sector and electric utilities exclude expenditures on energy sources such as hydropower, solar, wind, and geothermal. Also excludes expenditures for reported amounts of energy consumed by the energy industry for production, transportation, and processing operations]

DIVISION AND STATE	Total ¹	Per capita ² (dol.)	Percent change ³ 1985- 1986	SOURCE				END-USE SECTOR				
				Petroleum products		Natural gas	Coal	Electric- ity sales	Resi- dential	Com- mercial	Indus- trial	
				Total	Gaso- line							
U.S.	380,524	1,578	-14.5	173,154	91,491	61,937	27,914	150,200	96,138	68,092	91,478	124,816
N. Eng.	18,449	1,448	-13.2	10,175	4,906	2,051	305	7,128	5,780	3,755	2,845	6,089
ME.	1,859	1,586	-11.7	1,198	521	18	21	688	507	276	353	723
NH.	1,406	1,369	-9.7	823	428	69	50	568	449	208	252	499
VT.	771	1,425	-12.4	444	234	25	2	302	213	122	153	283
MA.	8,226	1,410	-14.0	4,452	2,131	1,203	181	3,066	2,577	1,820	1,161	2,688
RI.	1,281	1,324	-13.2	682	346	183	2	447	416	258	205	412
CT.	4,896	1,533	-13.5	2,576	1,247	553	49	2,057	1,618	1,073	721	1,484
Md. Atl.	54,401	1,460	-12.5	22,938	11,238	9,484	2,618	22,946	16,879	12,798	9,922	14,893
NY.	22,720	1,277	-12.1	9,243	4,740	4,218	435	10,236	7,591	6,696	2,639	5,595
NJ.	13,803	1,810	-13.8	8,748	2,921	2,097	140	5,180	3,802	2,952	2,502	4,547
PA.	17,988	1,511	-12.3	6,947	3,577	3,169	2,043	7,532	5,486	2,950	4,781	4,751
E. No. Cent.	69,038	1,655	-13.5	26,922	15,068	14,583	8,033	25,919	19,031	11,421	18,925	19,660
OH.	16,270	1,700	-13.2	8,666	3,987	3,736	2,373	7,164	5,011	3,040	5,083	5,138
IN.	10,336	1,878	-14.2	4,295	2,044	1,776	1,921	3,815	2,499	1,216	3,316	3,306
IL.	18,980	1,644	-13.5	7,037	3,689	4,251	1,619	7,637	5,341	3,730	5,069	4,849
MI.	14,454	1,583	-13.1	5,700	3,424	3,411	1,496	5,049	4,089	2,972	3,817	4,177
WI.	6,978	1,459	-13.7	3,024	1,744	1,409	624	2,454	2,081	1,063	1,643	2,190
W. No. Cent.	28,610	1,628	-14.6	13,537	7,312	4,553	2,349	10,130	7,409	4,821	6,977	9,801
MN.	6,449	1,531	-14.2	3,159	1,784	1,085	291	2,163	1,727	886	1,535	2,300
IA.	4,780	1,677	-16.4	2,198	1,175	852	371	1,669	1,309	721	1,309	1,440
MO.	7,582	1,497	-16.5	3,406	2,034	1,089	750	3,036	2,168	1,379	1,388	2,846
ND.	1,433	2,110	-13.1	671	312	120	444	386	286	191	529	428
SD.	1,074	1,518	-14.7	612	323	108	40	346	308	150	219	398
NE.	2,493	1,560	-15.8	1,223	879	409	119	858	604	501	483	925
KS.	4,789	1,952	-9.7	2,266	1,005	890	334	1,672	1,007	793	1,535	1,464
So. Atl.	61,208	1,495	-11.5	28,012	16,483	6,745	6,107	27,820	16,720	10,845	12,041	21,601
DE.	1,117	1,785	-16.0	589	293	145	124	438	288	163	282	384
MD.	8,820	1,484	-9.9	2,986	1,680	933	458	2,861	1,878	983	1,489	2,293
DC.	1,069	1,710	-7.0	286	165	201	3	584	238	435	160	236
VA.	6,696	1,501	-11.9	4,261	2,387	708	512	3,805	2,358	1,862	1,388	3,289
VV.	3,052	1,597	-18.1	1,379	886	500	1,315	1,023	688	382	1,120	661
NC.	9,720	1,538	-8.7	4,346	2,802	645	1,077	4,616	2,585	1,604	2,218	3,313
SC.	5,388	1,594	-7.5	2,125	1,322	436	481	2,712	1,394	778	1,540	1,677
GA.	9,477	1,554	-12.4	4,251	2,544	1,370	1,249	3,797	2,319	1,535	2,124	3,499
FL.	16,058	1,373	-13.0	7,787	4,614	807	888	8,384	4,878	3,313	1,720	6,049
E. So. Cent.	24,972	1,843	-8.6	10,849	6,403	2,818	3,413	10,866	5,629	3,760	7,086	8,516
KY.	6,026	1,617	-5.8	2,641	1,495	656	1,045	2,570	1,340	681	1,999	2,006
TN.	8,109	1,689	-9.2	3,513	2,222	743	876	3,683	1,703	1,411	2,086	2,926
AL.	6,767	1,676	-9.7	2,798	1,705	817	1,245	2,931	1,626	1,011	1,975	2,175
MS.	4,050	1,543	-9.8	1,699	981	602	247	1,672	980	657	1,026	1,407
W. So. Cent.	55,313	2,058	-22.0	27,255	11,311	12,737	2,822	18,870	10,340	7,506	20,878	18,591
AR.	3,784	1,598	-13.8	1,704	1,002	644	355	1,472	982	527	982	1,287
LA.	11,078	2,462	-22.7	5,411	1,847	2,714	309	3,487	1,783	1,404	4,922	2,968
OK.	5,633	1,704	-21.0	2,333	1,343	1,628	360	2,186	1,389	934	1,470	1,841
TX.	34,814	2,086	-22.7	17,807	7,119	7,751	1,798	11,745	6,186	4,641	13,504	10,484
Mid.	19,896	1,533	-14.6	9,168	5,484	2,768	2,007	7,898	4,578	3,892	3,907	7,518
MT.	1,309	1,803	-24.2	710	360	165	98	423	267	190	238	516
ID.	1,423	1,420	-18.1	681	404	138	17	586	319	246	315	543
WY.	1,329	2,622	-14.7	585	252	250	328	448	192	162	597	378
CO.	4,474	1,570	-18.2	1,990	1,297	847	349	1,629	1,073	1,055	649	1,688
NM.	2,380	1,595	-15.1	1,160	675	421	274	847	464	484	493	918
AZ.	5,094	1,554	-7.1	2,172	1,438	380	441	2,523	1,291	1,127	789	1,906
UT.	2,358	1,417	-15.5	1,061	625	405	275	839	593	393	497	874
NV.	1,548	1,602	-17.5	509	433	162	225	602	380	235	251	683
Pac.	46,585	1,359	-15.4	24,295	13,305	7,201	258	18,624	9,773	9,492	8,954	20,369
WA.	6,306	1,413	-15.4	3,484	1,788	510	113	2,290	1,338	942	1,040	2,985
OR.	3,834	1,419	-14.7	1,981	1,088	341	7	1,525	842	655	752	1,586
CA.	35,358	1,309	-15.1	16,528	9,816	6,094	98	13,960	7,162	7,341	8,865	14,191
AK.	1,653	3,108	-12.4	1,132	205	224	41	322	242	353	262	706
HI.	1,434	1,347	-25.3	1,090	398	32	1	527	188	201	235	811

¹ Includes sources not shown separately. Total expenditures are the sum of purchases for each source (including electricity sales) less electric utility purchases of fuel. ² Based on estimated resident population as of July 1. ³ Includes net imports of coal coke not shown separately by State.

Energy Consumption and Expenditures

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NO. 934. RESIDENTIAL ENERGY CONSUMPTION, EXPENDITURES, AND AVERAGE PRICES, 1979 TO 1985, AND BY REGION, 1985

[For period April to March of year stated. Excludes Alaska and Hawaii in 1979 and 1980. Covers occupied units only. Excludes household usage of gasoline for transportation and the use of wood or coal. Based on Residential Energy Consumption Survey; see Appendix III. For composition of regions, see fig. I, inside front cover. Btu=British thermal unit; see text, section 19.]

TYPE OF FUEL	Unit	1979	1980	1981	1982	1983	1985				
							Total	North-east	Mid-west	South	West
CONSUMPTION											
Total	Quad. Btu.	10.56	9.74	9.32	9.51	8.62	9.04	2.29	2.80	2.50	1.45
Avg. per household	Mil. Btu.	138	126	114	114	103	105	125	129	85	85
Natural gas	Quad. Btu.	5.58	5.31	4.94	5.39	4.77	4.98	.93	1.99	1.15	.91
Electricity	Quad. Btu.	2.47	2.42	2.46	2.48	2.42	2.48	.41	.55	1.06	.47
Fuel oil, kerosene	Quad. Btu.	2.19	1.71	1.55	1.33	1.14	1.26	.93	.13	.16	.04
Liquid petroleum gas	Quad. Btu.	.33	.31	.36	.31	.29	.31	.03	.13	.12	.03
EXPENDITURES											
Total	Bil. dol.	55.5	63.2	74.8	85.0	87.8	97.0	26.4	25.1	30.9	14.6
Avg. per household	Dollars	724	815	917	1,022	1,048	1,123	1,443	1,180	1,055	852
Natural gas	Bil. dol.	15.3	17.8	19.3	24.5	27.1	29.8	6.9	11.1	6.7	5.1
Electricity	Bil. dol.	29.9	32.6	40.1	45.9	48.4	54.5	12.2	11.8	21.7	8.8
Fuel oil, kerosene	Bil. dol.	8.6	10.7	12.5	11.8	9.6	9.6	7.0	1.0	1.3	.3
Liquid petroleum gas	Bil. dol.	1.7	2.1	2.9	2.7	2.7	3.1	.4	1.2	1.2	.4
AVERAGE PRICE (per million Btu)											
Total	Dollars	5.25	6.49	8.03	8.93	10.18	10.73	11.52	8.86	12.39	10.02
Natural gas	Dollars	2.74	3.36	3.90	4.55	5.67	5.97	7.43	5.59	5.81	5.55
Electricity	Dollars	12.10	13.46	16.32	18.51	19.98	22.98	29.77	21.54	20.39	18.94
Fuel oil, kerosene	Dollars	3.93	6.29	8.04	8.89	8.42	7.62	7.54	7.67	8.14	7.85
Liquid petroleum gas	Dollars	5.09	6.71	7.92	8.74	9.42	10.00	13.11	8.67	10.38	10.56

Source: U.S. Energy Information Administration, *Residential Energy Consumption Survey: Consumption and Expenditures*, annual through 1983; beginning 1985, triennial.

NO. 935. RESIDENTIAL ENERGY CONSUMPTION AND EXPENDITURES, BY TYPE OF FUEL AND SELECTED HOUSEHOLD CHARACTERISTIC: 1985

[For period April 1984 to March 1985. Quad.=quadrillion. See headnote, table 934]

CHARACTERISTIC	CONSUMPTION (Btu's)					EXPENDITURES				
	Total ¹ (quad.)	Avg. per house- hold ¹ (mil.)	Nat- ur- al gas (quad.)	Elec- tricity (quad.)	Fuel oil ² (quad.)	Total ¹ (bil. dol.)	Avg. per house- hold ¹ (dol.)	Nat- ur- al gas (bil. dol.)	Elec- tricity (bil. dol.)	Fuel oil ² (bil. dol.)
Total households										
Single family detached	9.04	105	4.98	2.48	1.26	97.0	1,123	29.8	54.5	9.6
Single family attached	6.27	117	3.46	1.80	.77	67.1	1,255	20.2	38.5	6.1
2-4 unit building	.45	112	.26	.11	.07	5.1	1,256	1.7	2.7	.6
5 or more unit building	.97	97	.64	.17	.16	9.5	950	4.1	4.2	1.3
Mobile home	.97	71	.51	.25	.21	10.3	761	3.1	5.0	1.3
Year house built:										
1939 or earlier	3.16	126	1.88	.54	.64	30.5	1,212	11.6	13.0	4.9
1940-1949	.74	106	.42	.17	.13	7.7	1,092	2.6	3.9	1.0
1950-1959	1.96	107	.80	.34	.18	14.1	1,120	4.7	7.7	1.4
1960-1964	.75	101	.40	.23	.09	8.2	1,098	2.3	4.9	.7
1965-1969	.82	99	.45	.27	.07	9.3	1,126	2.7	5.8	.6
1970-1974	.96	90	.49	.36	.05	11.5	1,079	2.9	7.7	.4
1975-1979	.88	87	.38	.41	.07	11.1	1,100	2.1	8.3	.5
1980 or later	.97	74	.15	.16	.03	4.5	903	.8	3.3	.2
Heating and cooling degree day zones:³										
Less than 2,000 CDD and—										
More than 7,000 HDD	1.03	114	.58	.22	.17	9.6	1,067	3.1	4.5	1.3
5,500-7,000 HDD	2.90	135	1.87	.55	.42	27.6	1,283	11.0	12.8	3.3
4,000-5,499 HDD	2.50	111	1.22	.63	.59	27.3	1,212	8.0	14.3	4.4
Less than 4,000 HDD	1.65	82	.93	.59	.05	18.1	905	5.3	11.6	.5
More than 2,000 CDD and less than 4,000 HDD	.97	73	.41	.50	(8)	14.4	1,081	2.4	11.3	(8)
1984 family income:										
Less than \$5,000	.71	90	.42	.16	.10	7.0	891	2.4	3.5	.7
\$5,000-\$9,999	1.32	95	.70	.31	.23	13.5	964	4.1	6.8	1.8
\$10,000-\$14,999	1.21	92	.67	.32	.17	12.6	965	3.9	7.0	1.3
\$15,000-\$19,999	.90	100	.49	.23	.14	9.4	1,043	2.9	5.0	1.0
\$20,000-\$24,999	.84	101	.45	.24	.12	9.0	1,080	2.7	5.1	.9
\$25,000-\$34,999	1.65	108	.90	.50	.21	18.2	1,189	5.4	10.7	1.7
\$35,000-\$49,999	1.28	121	.70	.40	.16	14.5	1,368	4.3	8.8	1.3
\$50,000 or more	1.13	139	.67	.33	.11	12.7	1,568	4.0	7.7	.8

B Base figure too small to meet statistical standards for reliability of derived figure, shown separately. ² Includes kerosene. ³ CDD=Cooling degree day; HDD=Heating degree day.

Source: U.S. Energy Information Administration, *Residential Energy Consumption Survey: Consumption and Expenditures*, April 1984 through March 1985.

NO. 936. AVERAGE RESIDENTIAL ENERGY CONSUMPTION AND EXPENDITURES OF ALL FUELS USED, BY MAIN HEATING FUEL TYPE AND HOUSEHOLD CHARACTERISTIC: 1985

[For period April 1984 through March 1985. See headnote, table 934]

HOUSEHOLD CHARACTERISTIC	CONSUMPTION PER HOUSEHOLD (mil. Btu)					EXPENDITURES PER HOUSEHOLD (dollars)				
	All households ¹	Households using as main heating fuel—			Fuel oil ²	All households ¹	Households using as main heating fuel—			Fuel oil ²
		Natural gas	With air conditioning	Without air conditioning			Natural gas	With air conditioning	Without air conditioning	
Total households.....	105	124	56	53	126	1,123	1,119	1,071	883	1,422
Region:										
Northeast.....	125	136	61	52	137	1,443	1,421	1,476	1,233	1,535
Midwest.....	129	142	70	72	124	1,160	1,154	1,151	1,284	1,298
South.....	85	115	54	43	90	1,055	1,121	1,047	811	1,155
West.....	85	99	54	53	121	852	873	916	705	1,124
Type:										
Single-family detached.....	117	140	70	64	137	1,255	1,272	1,289	1,046	1,582
Single-family attached.....	112	118	66	(8)	142	1,256	1,195	1,221	(8)	1,573
2-4 unit building.....	97	101	44	45	124	950	903	816	614	1,377
5 or more unit building.....	71	83	35	37	105	761	705	743	604	1,040
Mobile home.....	73	102	47	54	78	947	922	950	987	1,000
Year house built:										
1939 or earlier.....	126	138	64	58	136	1,212	1,177	929	809	1,502
1940 to 1949.....	106	114	61	(8)	130	1,092	1,030	1,231	(8)	1,473
1950 to 1959.....	107	119	65	40	116	1,120	1,101	1,280	822	1,386
1960 to 1964.....	101	118	54	49	104	1,098	1,147	1,038	792	1,126
1965 to 1969.....	99	121	56	49	122	1,126	1,182	1,076	797	1,463
1970 to 1974.....	90	119	50	58	102	1,079	1,128	987	1,061	1,303
1975 to 1979.....	87	119	61	53	116	1,100	1,078	1,163	916	1,418
1980 or later.....	74	92	47	57	112	903	827	918	913	1,180
1984 family income:										
Less than \$5,000.....	90	112	39	40	104	891	913	771	693	1,119
\$5,000-\$9,999.....	95	115	40	46	115	964	967	772	777	1,227
\$10,000-\$14,999.....	92	106	49	50	118	965	927	960	734	1,280
\$15,000-\$19,999.....	100	117	46	46	119	1,043	1,023	937	661	1,352
\$20,000-\$24,999.....	101	113	58	61	129	1,080	1,014	1,040	1,080	1,484
\$25,000-\$34,999.....	108	127	61	61	137	1,189	1,184	1,140	923	1,541
\$35,000-\$49,999.....	121	138	75	62	145	1,368	1,331	1,401	1,124	1,742
\$50,000 or more.....	139	164	67	65	152	1,568	1,606	1,329	1,136	1,832

B Base figure too small to meet statistical standards for reliability of derived figure. ¹ Includes households using liquid petroleum gas, not shown separately. ² Includes kerosene.

Sources: U.S. Energy Information Administration, *Residential Energy Consumption Survey: Consumption and Expenditures, April 1984 through March 1985*.

NO. 937. RESIDENTIAL ENERGY EXPENDITURES, BY TYPE OF END USE AND HOUSEHOLD CHARACTERISTIC: 1985

[For period April 1984 through March 1985. See headnote, table 934]

CHARACTERISTIC	EXPENDITURES (bil. dol.)				EXPENDITURES PER HOUSEHOLD (dollars)					
	All end uses	End use			All end uses	End use				
		Space heating	Cooling	Water heating		Space heating	Cooling	Water heating		
Total households.....	97.0	36.9	7.5	14.7	37.8	1,123	427	87	171	438
Type:										
Single-family detached.....	67.1	24.7	5.1	10.2	27.1	1,255	462	96	191	506
Single-family attached.....	5.1	2.2	.4	.7	1.9	1,256	531	95	174	456
2 to 4 unit building.....	9.5	4.2	4.	1.3	3.5	950	424	40	134	353
5 or more unit building.....	10.3	4.0	1.3	1.6	3.5	761	298	94	115	255
Mobile home.....	4.9	1.7	.3	.9	1.9	947	339	64	177	366
Year house built:										
1939 or earlier.....	30.5	14.3	1.1	4.1	11.1	1,212	566	44	162	440
1940 to 1949.....	7.7	3.0	.5	1.2	2.9	1,092	431	78	167	416
1950 to 1959.....	14.1	5.1	1.1	2.2	5.8	1,120	403	85	174	458
1960 to 1964.....	6.2	2.6	.8	1.3	3.4	1,098	355	113	171	459
1965 to 1969.....	9.3	2.9	1.0	1.4	3.9	1,126	358	126	170	472
1970 to 1974.....	11.5	3.9	1.3	1.9	4.4	1,079	366	121	178	414
1975 or later.....	15.7	5.0	1.6	2.7	6.3	1,035	331	109	179	416
1984 family income:										
Less than \$5,000.....	7.0	3.1	.3	1.1	2.5	891	392	43	138	319
\$5,000-\$9,999.....	13.5	5.9	.7	2.0	4.8	964	426	52	141	346
\$10,000-\$14,999.....	12.6	4.8	1.0	2.0	4.8	965	366	76	155	369
\$15,000-\$19,999.....	9.4	3.6	.7	1.5	3.6	1,043	401	72	171	398
\$20,000-\$24,999.....	9.0	3.5	.6	1.4	3.5	1,080	422	74	165	419
\$25,000-\$34,999.....	18.2	6.6	1.6	2.8	7.3	1,189	428	102	180	479
\$35,000-\$49,999.....	14.5	5.0	1.3	2.2	6.0	1,368	474	118	211	565
\$50,000 or more.....	12.7	4.3	1.4	1.7	5.2	1,568	535	173	215	646

¹ Appliance usage.

Sources: U.S. Energy Information Administration, *Residential Energy Consumption Survey: Consumption and Expenditures, April 1984 through March 1985*.

Commercial Buildings

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No. 938. COMMERCIAL BUILDINGS—ENERGY CONSUMPTION AND EXPENDITURES, BY MAJOR FUEL TYPE USED: 1983

[Covers buildings using one or more major fuel. Excludes industrial buildings. Excludes Alaska and Hawaii. Based on a sample survey of building representatives conducted between March and August 1983; therefore subject to sampling variability. For characteristics of commercial buildings, see also tables 1260-1262. Quad.=quadrillion]

ITEM	Unit	All major fuels	Electricity	Natural gas	Fuel oil	Propane	Purchased steam
Number of buildings using the fuel.....	1,000	3,774	3,764	2,239	538	250	59
Square footage of floorspace.....	Million	51,280	51,146	36,088	10,205	2,721	4,538
Square footage per building	1,000	13.6	13.6	16.1	19.0	10.9	77.5
Energy consumed, total.....	Quad. Btu	5,150	2,237	2,227	.354	.038	.294
Energy consumed per building.....	Mil. Btu	1,264	594	594	659	150	5,028
Energy consumed per square foot of floorspace	1,000 Btu	100	44	62	35	14	65
Energy consumed per employee	Mil. Btu	66	29	42	22	9	36
Expenditures, total	Mil. dol.	59,242	41,554	12,284	2,369	352	2,683
Expenditures per building.....	\$1,000	15.7	11.0	5.5	4.4	1.4	45.8
Expenditures per square foot of floorspace.....	Dollars	1.16	.81	.34	.23	.13	.59
Expenditures per million Btu of energy consumed.....	Dollars	11.50	18.58	5.52	6.69	9.38	9.12

Source: U.S. Energy Information Administration, *Nonresidential Buildings Energy Consumption Survey: Consumption and Expenditures, 1983*.

No. 939. COMMERCIAL BUILDINGS—ENERGY CONSUMPTION AND EXPENDITURES: 1983

[Covers buildings using one or more major fuel. Excludes industrial buildings. Excludes Alaska and Hawaii. Based on a sample survey of building representatives conducted between March and August 1983; therefore subject to sampling variability. For characteristics of commercial buildings, see tables 1260-1262. For composition of regions, see fig. I, Inside front cover]

BUILDING CHARACTERISTIC	ALL BUILDINGS USING ANY MAJOR FUEL		CONSUMPTION (quadrillion Btu)		EXPENDITURES (mil. dol.)			
	Number (1,000)	Square feet (mil.)	Major fuel, total ¹	Electricity	Natural gas	Major fuel, total ¹	Electricity	Natural gas
All buildings.....	3,774	51,280	5,150	2,237	2,227	59,242	41,554	12,284
Year constructed:								
1900 or before.....	279	2,884	.194	.051	.097	2,149	1,209	.583
1901 to 1920.....	369	5,228	.354	.112	.170	3,918	2,409	.954
1921 to 1945.....	685	8,269	.846	.295	.384	9,355	5,874	2,183
1946 to 1960.....	883	9,434	.938	.362	.424	10,406	6,909	2,309
1961 to 1970.....	700	9,873	1,099	.496	.464	12,713	9,041	2,491
1971 to 1973.....	207	3,411	.366	.199	.135	4,742	3,736	.761
1974 to 1979.....	517	6,550	.861	.423	.379	10,004	7,472	2,114
1980 to 1983.....	135	5,631	.491	.298	.172	5,964	4,904	.889
Principal activity within building:								
Assembly.....	452	5,475	.377	.121	.197	4,147	2,553	1,094
Educational.....	177	6,044	.484	.155	.246	4,843	2,969	1,317
Food sales/services.....	380	2,050	.437	.222	.193	5,510	4,176	1,139
Health care.....	61	2,277	.465	.147	.219	4,985	2,487	1,115
Lodging.....	106	2,241	.365	.151	.171	3,932	2,714	.875
Mercantile/services.....	1,055	10,347	.838	.434	.337	10,338	7,836	1,969
Office.....	575	8,444	1,039	.521	.371	13,097	9,866	2,031
Residential.....	235	2,442	.179	.042	.095	1,856	970	.595
Warehouse.....	387	6,700	.506	.208	.248	5,530	3,786	1,358
Other.....	167	2,738	.276	.151	.078	3,377	2,564	.405
Vacant.....	180	2,522	.184	.086	.073	2,226	1,634	.384
Region:								
Northeast.....	653	11,413	.954	.345	.314	13,580	9,031	2,143
Midwest.....	1,157	15,718	1.922	.687	1,044	18,991	12,110	5,542
South.....	1,415	16,683	1.563	.849	.550	19,218	15,121	2,833
West.....	549	7,467	.710	.346	.319	7,454	5,292	1,767
Square footage:								
5,000 or less.....	2,112	4,680	.871	.332	.474	10,016	6,821	2,669
5,001 to 10,000.....	705	5,083	.562	.217	.285	6,323	4,168	1,692
10,001 to 25,000.....	580	8,795	.727	.321	.301	8,872	6,298	1,731
25,001 to 50,000.....	216	7,470	.695	.305	.317	8,142	5,840	1,746
50,001 to 100,000.....	104	6,963	.616	.291	.239	6,956	5,035	1,900
100,001 to 200,000.....	49	6,613	.589	.251	.237	6,468	4,444	1,233
Over 200,000.....	29	11,675	1.090	.520	.372	12,484	8,946	1,912

¹ Includes fuel oil, propane, and purchased steam, not shown separately.

Source: U.S. Energy Information Administration, *Nonresidential Buildings Energy Consumption Survey: Consumption and Expenditures, 1983*.

NO. 940. MANUFACTURING ENERGY CONSUMPTION FOR HEAT AND POWER, BY TYPE OF FUEL AND INDUSTRY GROUP: 1985

[In trillions of Btu. Based on the Manufacturing Energy Consumption Survey; therefore subject to sampling variability]

SIC ¹ code	INDUSTRY	Total consumption	Net electricity ²	Fuel oil ³	Natural gas	Coal and coke	Other
(x)	Total	13,747.9	2,286.5	705.2	4,617.7	1,980.3	4,158.2
20	Food and kindred	954.3	165.8	65.1	458.9	131.7	132.9
21	Tobacco products	19.8	4.6	2.3	3.4	9.4	.1
22	Textile mill products	248.1	88.1	21.3	91.2	38.0	9.7
23	Apparel and other textile products	32.4	15.3	2.9	12.5	1.4	.4
24	Lumber and wood products	348.9	55.1	23.4	31.4	(D)	(D)
25	Furniture and fixtures	48.6	15.2	2.7	19.6	2.1	9.1
26	Paper and allied products	2,355.6	183.6	166.9	379.7	322.5	1,302.8
27	Printing and publishing	98.6	52.5	2.4	40.6	(D)	(D)
28	Chemicals and allied products	2,460.5	445.2	100.3	1,180.9	336.4	397.7
29	Petroleum and coal products	2,426.3	120.3	134.9	690.7	7.3	1,472.8
30	Rubber and misc. plastic products	220.8	90.7	15.2	102.0	8.1	4.8
31	Leather and leather products	13.4	4.3	3.3	4.5	.9	.4
32	Stone, clay, and glass products	927.6	116.3	33.1	397.0	349.0	323
33	Primary metal industries	2,382.2	458.7	53.2	689.2	560.6	520.5
34	Fabricated metal products	286.2	91.2	16.7	171.6	8.7	8.0
35	Machinery, except electrical	277.6	114.2	14.6	113.7	30.6	4.5
36	Electric and electronic equipment	223.7	110.1	10.4	91.4	8.6	3.3
37	Transportation equipment	322.2	115.0	25.7	120.7	43.8	17.0
38	Instruments and related products	79.7	29.2	8.1	23.6	(D)	(D)
39	Miscellaneous manufacturing	31.3	11.4	2.6	15.4	1.3	

D. Figure withheld to avoid disclosure. X. Not applicable. ¹ Standard Industrial Classification; see text, section 13. ² Net electricity is obtained by aggregating purchases, transfers in, and generation from noncombustible renewable resources minus quantities sold and transferred out. ³ Includes distillate and residual.

Source: U.S. Energy Information Administration, *Monthly Energy Review*, January 1987.

NO. 941. FOSSIL FUEL PRICES IN CURRENT AND CONSTANT (1982) DOLLARS: 1960 TO 1987

[In cents per million British thermal units (Btu), except as indicated. All fuel prices taken as close to the point of production as possible. See text, section 19, for explanation of Btu conversions from mineral fuels. Minus sign (–) indicates decrease]

YEAR OR PERIOD	CURRENT DOLLARS					CONSTANT (1982) DOLLARS					GNP ³ price deflators (1982=100)
	Composite ¹	Crude oil	Natural gas	Bituminous coal ²	Anthracite coal	Composite ¹	Crude oil	Natural gas	Bituminous coal ²	Anthracite coal	
1960	28.3	49.7	12.6	18.8	33.8	91.6	160.8	40.8	60.8	109.4	30.9
1965	27.7	49.3	14.5	17.9	36.3	82.0	145.9	42.9	63.0	107.4	33.8
1970	31.7	54.8	15.4	26.2	48.8	75.5	130.5	36.7	62.4	116.2	42.0
1973	39.8	67.1	20.1	36.5	61.7	80.4	135.6	40.6	73.7	124.6	49.5
1975	82.5	132.2	41.1	83.9	149.5	139.1	222.9	69.3	141.5	252.1	59.3
1976	90.2	141.2	53.1	85.0	159.3	142.9	223.8	84.2	134.7	243.9	63.1
1977	100.4	147.8	72.3	87.7	153.8	149.8	219.6	107.4	130.3	228.5	67.3
1978	111.6	155.2	83.6	97.8	152.7	154.6	215.0	115.8	135.6	211.5	72.2
1979	141.7	217.9	108.1	105.3	177.2	180.3	277.2	137.5	134.0	225.4	78.6
1980	204.2	372.2	144.8	109.4	185.9	238.3	494.3	169.0	127.7	216.9	85.7
1981	274.5	547.8	179.5	117.9	190.1	292.0	582.8	191.0	125.4	202.2	94.0
1982	275.4	491.7	222.2	122.1	214.0	275.8	491.7	222.2	122.1	214.0	100.0
1983	270.1	451.6	232.3	117.2	230.0	260.0	434.6	223.6	112.8	221.4	103.8
1984	264.6	448.2	239.9	115.9	230.7	245.7	414.3	222.7	107.6	193.8	107.7
1985	261.2	415.3	225.7	114.8	204.2	225.9	373.5	203.0	103.2	183.6	111.2
1986	165.3	215.7	174.6	108.2	191.1	144.9	189.0	153.2	94.8	167.5	114.1
1987, prel	171.4	265.7	154.1	104.8	186.3	145.9	226.1	131.1	89.2	158.6	117.5
Percent change:											
1960-70	12.0	10.3	22.2	39.4	44.4	-17.6	-18.8	-10.0	2.6	6.2	35.9
1970-73	25.6	22.4	30.5	39.3	26.4	6.5	3.9	10.6	18.1	7.2	17.9
1973-75	107.3	97.0	104.5	129.9	142.3	73.0	64.4	70.7	92.0	102.3	19.8
1975-79	71.8	164.8	189.0	25.5	18.5	29.8	24.4	98.4	-5.3	-10.8	32.5
1979-80	44.1	70.8	34.0	3.8	4.9	32.2	56.7	22.8	-4.7	-3.8	9.0
1980-81	34.4	47.2	24.0	7.8	2.3	22.5	34.2	13.0	-1.8	-8.8	9.7
1981-82	-5.5	-10.2	23.8	3.6	12.6	-5.5	-15.6	16.3	-2.6	5.8	8.4
1982-83	-2.1	-8.2	4.5	-4.0	7.5	-5.7	-8.8	-4.7	-4.6	-12.5	3.7
1983-84	-2.0	-1.2	3.3	-1.1	-9.3	-2.2	-8.1	-8.8	-8.8	-4.1	3.8
1984-85	-5.1	-6.9	-5.9	-1.0	-6.4	-35.9	-49.4	-24.5	-8.1	-8.8	3.2
1985-86	-34.2	-48.1	-22.6	-5.7	-2.5	7	19.6	-14.4	-5.9	-5.3	2.6
1986-87	3.7	23.2	-11.8	-3.1	-2.5						

¹ Weighted by relative importance of individual fuels in total fuels production. ² Product; see text, section 15.

² Includes lignite.

³ GNP=Gross national

Source: U.S. Energy Information Administration, *Annual Energy Review*.

World Energy Consumption and Production—Flow of Crude Oil

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No. 942. WORLD ENERGY CONSUMPTION, BY REGION AND ENERGY SOURCE: 1960 TO 1986

[In tons of coal equivalent. Metric ton = 1.1023 short tons. Kilogram = 2.205 pounds. See text, section 31 for general comments about the data]

REGION AND ENERGY SOURCE	CONSUMPTION (mil. metric tons)					PER CAPITA (kilograms)				PERCENT DISTRIBUTION			
	1960	1970	1980	1985	1986	1960	1970	1980	1986	1960	1970	1980	1986
World total...	3,924	6,440	8,544	9,142	9,322	1,302	1,748	1,919	1,896	100.0	100.0	100.0	100.0
North America...	1,599	2,502	2,798	2,719	2,708	5,861	7,825	7,480	6,667	40.7	38.9	32.7	29.1
United States...	1,454	2,217	2,364	2,283	2,278	8,047	10,811	10,386	9,489	37.1	34.4	27.7	24.4
South America...	79	143	251	259	277	535	749	1,046	1,012	2.0	2.2	2.9	3.0
Europe...	1,039	1,720	2,145	2,171	2,190	2,443	3,745	4,433	4,440	26.5	26.7	25.1	23.5
Asia...	514	903	1,579	1,928	1,983	276	386	607	689	13.1	14.0	18.5	21.3
Japan...	96	333	435	460	440	1,025	3,246	3,728	3,625	2.4	5.2	5.1	4.7
Soviet Union...	595	999	1,473	1,716	1,797	2,777	4,132	5,549	6,389	15.2	15.5	17.2	19.3
Oceania...	41	71	105	121	124	2,597	3,675	4,572	4,960	1.0	1.1	1.2	1.3
Energy source:													
Solid fuels...	1,940	2,159	2,632	3,029	3,083	644	586	591	627	49.4	33.5	30.8	33.1
Liquid fuels...	1,306	2,635	3,778	3,631	3,701	433	770	848	753	33.3	44.0	44.2	39.7
Natural gas...	593	1,292	1,834	2,056	2,093	197	351	412	426	15.1	20.1	21.5	22.7
Electricity...	84	154	301	427	445	28	42	68	91	2.1	2.4	3.5	4.8

1 Includes Central America.

Source: Statistical Office of the United Nations, New York, NY, *Energy Statistics Yearbook*, annual. (Copyright)

No. 943. WORLD PRIMARY ENERGY PRODUCTION, BY REGION AND TYPE: 1973 TO 1986

[In quadrillion Btu. Btu=British thermal units. For Btu conversion factors, see source]

REGION AND TYPE	1973	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986, prel.
	244.8	245.0	267.8	273.0	287.3	285.4	280.6	278.5	280.7	292.9	303.8	314.1
World total...	73.3	71.1	72.4	74.0	78.2	80.6	81.0	81.4	79.2	84.6	84.1	83.2
North America...	62.0	59.8	60.1	61.0	63.7	64.7	64.3	63.8	61.1	65.8	64.6	64.1
Central and South America...	12.9	10.6	10.9	11.2	12.2	12.1	12.0	11.9	12.0	12.7	13.4	14.1
Western Europe...	19.6	21.4	24.0	24.8	27.4	28.7	29.9	30.8	32.1	32.6	35.0	35.6
Eastern Europe and Soviet Union...	51.4	55.9	61.6	64.0	66.1	67.7	68.2	70.4	72.3	74.0	78.5	81.7
Middle East...	46.6	43.5	49.8	47.2	48.5	41.8	36.6	29.5	27.2	27.1	25.7	30.8
Africa...	14.8	13.3	16.4	16.5	18.1	17.2	14.9	15.0	15.8	16.6	18.1	17.8
Far East and Oceania...	26.2	29.3	32.8	35.3	36.7	37.3	38.1	39.4	42.1	45.2	49.0	51.0
Crude oil...	117.8	111.6	126.0	126.3	131.6	125.5	117.5	111.7	111.3	114.1	112.8	119.2
Natural gas...	43.2	43.9	46.9	48.2	51.6	52.9	54.3	53.7	53.9	57.7	61.5	62.6
Natural gas liquids...	4.2	4.4	4.7	4.8	5.2	5.5	5.9	5.8	6.0	6.5	6.2	6.9
Coal...	63.8	66.3	69.3	70.4	74.6	75.8	76.0	78.8	79.1	82.1	86.0	88.2
Hydroelectric power...	13.5	15.0	15.5	16.7	17.6	18.2	18.4	18.9	19.8	20.2	20.6	20.7
Nuclear...	2.2	3.9	5.4	6.5	6.7	7.5	8.6	9.4	10.6	12.3	15.2	16.4

Source: U.S. Energy Information Administration, *International Energy Annual*.

No. 944. DAILY INTERNATIONAL FLOW OF CRUDE OIL, BY AREA: 1985

[In thousands of barrels per day]

EXPORTING AREA	Total	IMPORTING AREA						
		North America		Central and South America	Western Europe	Eastern Europe	Middle East and Africa	Japan
		U.S.	Canada					
World total...	22,321	3,201	273	1,630	8,139	2,001	1,170	3,331
North America...	2,117	1,183	57	292	368	-	47	134
United States...	204	(x)	21	1,150	-	-	-	33
Central and South America...	1,151	477	61	312	228	1	2	11
Western Europe...	2,363	310	94	27	1,912	2	47	3
Eastern Europe and Soviet Union...	2,281	-	-	128	677	1,299	3	126
Middle East...	6,181	245	10	598	2,249	509	821	2,328
Africa...	4,021	612	51	172	2,653	180	238	42
Far East and Oceania...	2,207	374	-	100	54	10	-	613

- Represents zero. X Not applicable.

¹ Includes shipments to Puerto Rico and Virgin Islands.

Source: U.S. Energy Information Administration, *International Energy Annual*.

No. 945. U.S. FOREIGN TRADE IN SELECTED MINERAL FUELS: 1970 TO 1987

[Btu=British thermal units. For Btu conversion factors, see text, section 19. Minus sign (-) indicates an excess of imports over exports. See also *Historical Statistics, Colonial Times to 1970*, series M 100, 101, 127, 128, 140, 141, 178, and 181]

YEAR	NATURAL GAS						CRUDE OIL					
	Imports		Exports		Net trade		Imports ¹		Exports		Net trade	
	Bil. cu. ft.	Tril. Btu	Bil. cu. ft.	Tril. Btu	Bil. cu. ft.	Tril. Btu	Mil. bbl.	Tril. Btu	Mil. bbl.	Tril. Btu	Mil. bbl.	Tril. Btu
1970.....	820.8	846	69.8	72	-751.0	-774	483	2,814	5	29	-478	-2,785
1973.....	1,032.9	1,060	77.2	79	-955.7	-981	1,184	6,887	1	4	-1,183	-6,883
1974.....	959.3	985	76.8	78	-882.5	-907	1,269	7,395	1	6	-1,268	-7,389
1975.....	953.0	978	72.7	74	-880.3	-904	1,498	8,721	2	12	-1,498	-8,709
1976.....	968.8	988	64.7	66	-899.1	-922	1,935	11,239	3	17	-1,932	-11,221
1977.....	1,011.0	1,037	55.6	56	-954.5	-981	2,414	14,027	18	106	-2,386	-13,921
1978.....	985.5	995	52.5	53	-913.0	-941	2,320	13,460	58	335	-2,282	-13,125
1979.....	1,253.4	1,300	55.7	56	-1,197.7	-1,243	2,380	13,825	86	497	-2,294	-13,328
1980.....	984.8	1,006	48.7	49	-936.0	-957	1,926	11,195	105	609	-1,821	-10,586
1981.....	903.9	917	59.4	60	-844.8	-857	1,605	9,336	83	482	-1,522	-8,854
1982.....	933.3	950	51.7	52	-881.6	-899	1,273	7,418	86	500	-1,187	-6,918
1983.....	919.8	942	54.6	55	-865.1	-887	1,215	7,079	60	348	-1,155	-6,731
1984.....	843.1	847	54.8	55	-786.3	-792	1,254	7,302	68	384	-1,188	-6,918
1985.....	949.2	951	55.3	58	-893.9	-893	1,168	6,814	75	432	-1,093	-6,382
1986.....	750.1	748	61.2	62	-688.9	-686	1,525	8,892	56	326	-1,469	-8,566
1987.....	988.0	985	60.0	60	-928.0	-925	1,706	10,068	55	319	-1,651	-9,748
COAL												
	Imports		Exports		Net trade		Imports		Exports		Net trade	
	1,000 sh. tons	Tril. Btu	1,000 sh. tons	Tril. Btu	1,000 sh. tons	Tril. Btu	Mil. bbl.	Tril. Btu	Mil. bbl.	Tril. Btu	Mil. bbl.	Tril. Btu
1970.....	36	1	71,733	1,936	71,697	1,935	765	4,656	89	520	-676	-4,136
1973.....	127	3	53,587	1,425	53,480	1,422	1,099	6,578	84	482	-1,015	-6,097
1974.....	2,080	52	60,661	1,620	58,581	1,568	982	5,731	79	458	-883	-5,273
1975.....	940	24	66,309	1,761	65,369	1,738	712	4,227	74	427	-638	-3,800
1976.....	1,203	30	60,021	1,597	58,818	1,587	741	4,434	79	452	-662	-3,982
1977.....	1,647	41	54,312	1,442	52,685	1,401	800	4,728	70	408	-730	-4,321
1978.....	2,953	74	40,714	1,078	37,761	1,004	733	4,364	74	432	-659	-3,932
1979.....	2,059	51	66,042	1,753	63,983	1,702	707	4,108	86	505	-621	-3,603
1980.....	1,194	30	91,742	2,421	90,548	2,391	603	3,463	94	551	-509	-2,912
1981.....	1,043	26	112,541	2,944	111,498	2,918	584	3,303	134	781	-450	-2,522
1982.....	742	19	106,277	2,787	105,535	2,768	593	3,359	211	1,224	-382	-2,195
1983.....	1,271	32	77,772	2,045	76,501	2,013	629	3,568	210	1,217	-419	-2,351
1984.....	1,286	32	81,482	2,151	80,196	2,119	736	4,131	198	1,161	-538	-2,970
1985.....	1,952	49	92,680	2,438	90,728	2,389	681	3,798	211	1,225	-470	-2,571
1986.....	2,212	55	85,518	2,248	83,306	2,193	747	4,199	230	1,344	-516	-2,855
1987.....	1,747	44	79,607	2,097	77,860	2,053	694	3,885	226	1,330	-468	-2,556

¹ Beginning 1977, includes strategic petroleum reserve imports.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

NO. 946. CRUDE OIL IMPORTS INTO U.S., BY COUNTRY OF ORIGIN: 1970 TO 1987

COUNTRY OF ORIGIN	IMPORTS (mil. 42-gal. bbls.)												PERCENT DISTRIBUTION			
	1970	1973	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1970	1980	1987
Total.....	483	1,184	1,498	2,320	2,380	1,926	1,805	1,273	1,215	1,254	1,168	1,525	1,706	100.0	100.0	100.0
Canada.....	245	365	219	90	99	73	60	78	100	125	171	208	222	50.7	3.8	13.0
Mexico.....	-	(2)	26	115	180	186	171	235	280	241	261	227	220	-	9.8	12.9
Norway.....	-	-	5	38	28	53	42	37	24	41	11	19	25	-	2.7	1.5
Trinidad-Tobago.....	(2)	22	42	52	45	42	37	34	30	32	36	34	27	(2)	1.6	1.6
United Kingdom.....	-	-	62	72	83	135	161	133	138	102	116	111	-	-	3.3	6.6
OPEC.....	222	767	1,171	1,892	1,866	1,414	1,067	633	540	553	479	771	876	46.0	73.4	51.3
Algeria.....	2	44	96	231	222	167	95	33	64	71	31	28	42	4.4	8.7	2.5
Ecuador.....	-	17	21	14	11	6	14	12	21	17	20	23	8	-	3.3	5.5
Gabon.....	-	10	14	15	9	13	14	21	21	19	9	13	-	-	5.5	.7
Indonesia.....	26	73	138	195	139	115	116	82	115	111	107	108	96	5.4	6.0	5.6
Iran.....	12	79	102	202	108	3	-	13	18	4	10	7	36	2.5	.2	2.1
Iraq.....	-	2	(2)	23	32	10	-	1	4	5	17	29	30	-	5.5	1.7
Kuwait.....	12	15	1	2	2	10	-	1	3	9	1	10	26	2.5	.5	1.5
Libya.....	17	49	81	233	234	200	116	8	-	-	-	-	3.5	10.4	-	-
Nigeria.....	17	164	272	332	390	308	223	186	110	76	102	160	193	3.5	16.0	11.3
Qatar.....	-	3	7	23	11	8	3	3	-	1	4	-	4	-	4	-
Saudi Arabia.....	15	188	256	417	492	458	406	194	117	113	48	226	234	3.1	23.8	13.7
United Arab Emirates.....	23	26	43	141	103	63	28	30	7	33	13	14	4.8	3.3	1.2	-
Venezuela.....	98	126	144	66	107	57	54	56	60	93	112	152	178	20.3	3.0	10.4
Other.....	16	30	35	71	110	95	93	95	108	124	109	150	225	3.3	4.9	13.2

- Represents zero. Z Less than 500,000 or less than .05 percent.

Source: 1970-1975, U.S. Bureau of Mines, *Minerals Yearbook and Mineral Industry Surveys*; 1978-1980, U.S. Energy Information Administration, *Petroleum Statement*, annual; thereafter, U.S. Energy Information Administration, *Petroleum Supply Annual*.

Crude Oil and Refined Products—Energy Producing Companies

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No. 947. CRUDE OIL AND REFINED PRODUCTS SUMMARY: 1973 TO 1988

[Barrels of 42 gallons. Data are averages]

YEAR AND MONTH	CRUDE OIL (1,000 bbl. per day)			REFINED OIL PRODUCTS (1,000 bbl. per day)			Total oil imports ² (1,000 bbl. per day)	CRUDE OIL STOCKS ³ (mil. bbl.)		
	Input to refiner- ies	Do- mestic pro- duction	Imports		Ex- ports	Do- mestic de- mand	Im- ports	Ex- ports	Total	Strategic re- serve
			Total ¹	Strategic re- serve						
1973.....	12,431	9,208	3,244	(X)	2	17,308	3,012	229	6,256	242
1974.....	12,133	8,774	3,477	(X)	3	16,653	2,835	218	6,112	265
1975.....	12,442	8,375	4,105	(X)	6	16,322	1,951	204	6,056	271
1976.....	13,416	8,132	5,287	(X)	8	17,461	2,026	215	7,313	285
1977.....	14,602	8,245	6,615	21	50	18,431	2,193	193	8,807	348
1978.....	14,739	8,707	6,356	162	158	18,847	2,008	204	8,363	376
1979.....	14,648	8,552	6,519	67	235	18,513	1,937	236	8,456	430
1980.....	13,481	8,597	5,283	44	287	17,056	1,646	258	6,809	466
1981.....	12,470	8,572	4,396	256	228	16,058	1,599	367	5,996	594
1982.....	11,774	8,649	3,488	165	238	15,296	1,625	579	5,113	644
1983.....	11,685	8,688	3,329	234	164	15,231	1,722	575	5,051	723
1984.....	12,044	8,879	3,426	197	181	15,726	2,011	541	5,437	796
1985.....	12,002	8,971	3,201	118	204	15,726	1,866	577	5,087	814
1986.....	12,716	8,680	4,178	48	154	16,281	2,045	631	6,224	843
1987.....	12,854	8,349	4,674	73	151	16,665	2,004	613	6,678	890
1st qtr.....	12,314	8,446	4,015	78	169	16,575	2,031	625	6,046	852
2d qtr.....	12,788	8,371	4,425	71	143	16,455	1,823	592	6,249	855
3d qtr.....	13,328	8,222	5,307	68	136	16,710	2,102	577	7,408	871
4th qtr.....	12,975	8,359	4,831	74	158	16,916	2,058	659	6,988	890
1988 ⁴	13,152	8,274	4,906	50	168	16,910	2,018	641	6,924	913
1st qtr.....	12,925	8,321	4,670	46	194	17,443	2,171	672	6,871	899
2d qtr.....	13,378	8,227	5,112	53	143	16,377	1,865	611	6,877	913

X Not applicable. ¹Includes Strategic Petroleum Reserve.

²Crude oil (including Strategic Petroleum Reserve imports) plus refined products.

³End of year or quarter.

⁴Preliminary.

Source: U.S. Energy Information Administration, *Monthly Energy Review*, April 1988.

NO. 948. ENERGY PRODUCING COMPANIES—SELECTED FINANCIAL AND INVESTMENT INDICATORS: 1978 TO 1986

[Based on data from major publicly-owned domestic crude oil producing companies which either had at least one percent of domestic production or reserves of oil, natural gas, coal, or uranium, or at least one percent of refining capacity or petroleum product sales. There were 26 companies during 1978 through 1982; 25 in 1983; and 22 during 1984 through 1986]

ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986
INCOME STATEMENT (bil. dol.)									
Operating revenues.....									
Operating expenses.....									
Operating Income.....									
Pretax Income.....									
Net income.....									
Funds from operations ¹									
BALANCE SHEET (bil. dol.)									
Net property, plant, and equipment.....									
Net investment in place ²									
Total assets.....									
RATIOS (percent)									
Net income to operating revenues.....									
Net income to total assets.....									
Net income to stockholders' equity.....									
Long-term debt to stockholders' equity ³									
Long-term debt to total assets ³									

¹The sum of net income, depreciation, depletion and amortization, deferred taxes, dry hole expenses, etc. ²Composed of net property, plant and equipment plus investment and advances to unconsolidated subsidiaries. ³Long-term debt includes amounts applicable to capitalized leases.

Source: U.S. Energy Information Administration, *Performance Profiles of Major Energy Producers*, annual, and unpublished data.

NO. 949. PETROLEUM AND COAL PRODUCTS CORPORATIONS—SALES, NET PROFIT, AND PROFIT PER DOLLAR OF SALES: 1975 TO 1987

[Represents SIC group 29. Profit rates are averages of quarterly figures at annual rates beginning 1986, excludes estimates for corporations with less than \$250,000 in assets]

ITEM	Unit	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 ¹
Sales.....	Bil. dol....	121.8	162.3	180.3	242.7	333.2	376.1	357.1	312.7	338.4	320.9	226.5	248.3
Net profit:													
Before income taxes.....	Bil. dol....	13.3	17.8	19.2	32.2	39.1	35.3	27.8	27.1	24.5	17.7	9.8	14.2
After income taxes.....	Bil. dol....	9.3	12.2	12.8	21.9	25.5	23.7	19.7	19.3	17.2	12.7	8.8	10.9
Depreciation ¹	Bil. dol....	5.6	8.6	7.7	9.5	11.6	13.7	18.3	17.5	20.7	22.1	21.9	20.3
Profits per dollar of sales:													
Before income taxes.....	Cents.....	10.9	11.0	10.6	13.3	11.7	9.4	7.8	8.7	7.2	5.5	4.1	5.8
After income taxes.....	Cents.....	7.6	7.5	7.1	9.0	7.7	6.3	5.5	6.2	5.1	4.0	3.8	4.5
Profits on stockholders' equity:													
Before income taxes.....	Percent ...	17.9	19.9	19.8	30.0	30.7	25.6	18.7	17.8	14.3	11.7	6.8	10.1
After income taxes.....	Percent ...	12.5	13.6	13.3	20.4	20.0	17.2	13.2	12.7	10.0	8.5	6.1	7.7

¹ Includes depletion and accelerated amortization of emergency facilities.

Source: Through 1981, U.S. Federal Trade Commission and, beginning 1982, U.S. Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations*.

NO. 950. MAJOR PETROLEUM COMPANIES—FINANCIAL DATA SUMMARY: 1973 TO 1987

[Data represent a composite of approximately 42 major worldwide petroleum companies aggregated on a consolidated, total company basis]

ITEM	1973	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
FINANCIAL DATA (bil. dol.)												
Net income.....	11.8	11.6	16.0	32.8	32.9	29.2	21.1	20.6	22.7	19.4	10.8	13.5
Depreciation, depletion, etc.....	10.5	11.3	19.8	24.9	32.5	34.9	37.2	37.4	45.3	53.0	43.7	42.1
Cash flow ¹	22.3	22.8	35.8	57.7	65.4	64.1	58.3	58.1	68.0	72.4	54.5	55.6
Dividends paid.....	4.0	4.7	6.8	8.0	9.3	10.6	10.6	10.5	11.6	12.0	12.1	12.6
Net internal funds available for investment or debt repayment ²	18.3	18.1	29.0	49.7	56.1	53.5	47.7	47.6	56.4	60.4	42.4	43.0
Capital and exploratory expenditures.....	16.3	26.8	37.1	51.1	62.1	79.2	67.8	60.7	57.5	58.3	38.3	45.0
Long-term capitalization.....	102.9	121.1	168.0	196.9	211.4	248.1	243.8	240.0	285.7	272.1	279.9	275.1
Long-term debt.....	22.5	28.9	45.1	48.1	49.8	59.2	62.6	61.0	95.8	93.5	85.5	83.1
Preferred stock.....	.4	.4	.9	.9	2.0	2.0	3.5	3.5	5.2	3.3	3.7	4.0
Common stock and retained earnings ³	80.0	91.9	122.0	147.9	159.6	186.9	177.7	175.5	184.7	175.3	180.7	188.0
Excess of expenditures over cash income ⁴	-2.0	8.9	8.1	1.4	6.0	25.7	20.1	3.1	1.1	-2.1	3.0	6.4
RATIOS⁵ (percent)												
Long-term debt to long-term capitalization.....	22.0	23.8	26.8	24.4	23.6	23.8	25.7	25.4	33.5	34.4	34.1	30.2
Net income to total average capital.....	12.0	10.0	8.9	17.8	17.0	10.4	8.8	8.8	8.6	7.0	4.0	4.9
Net income to average common equity.....	15.6	13.1	13.5	24.0	22.5	17.7	11.5	12.0	12.5	10.8	6.2	7.3

¹ Generally represents internally-generated funds from operations. Sum of net income and noncash charges such as depreciation, depletion, and amortization. ² Cash flow minus dividends paid. ³ Includes common stock, capital surplus, and earned surplus accounts after adjustments. ⁴ Capital and exploratory expenditures plus dividends paid minus cash flow.

⁵ Represents approximate year-to-year comparisons because of changes in the makeup of the group due to mergers and other corporate changes.

Source: Carl H. Pforzheimer & Co., New York, NY, *Comparative Oil Company Statements*, 1987-1986, and earlier reports.

NO. 951. ELECTRIC UTILITY SALES AND AVERAGE PRICES, BY END-USE SECTORS: 1970 TO 1987

[Prior to 1980, covers Class A and B privately-owned electric utilities; thereafter, Class A utilities whose electric operating revenues were \$100 million or more during the previous year]

YEAR	SALES (bil. kWh)				AVERAGE PRICE OF ELECTRICITY SOLD (cents per kWh)							
	Total ¹	Residential	Commercial	Industrial	Current dollars				Constant (1982) dollars ²			
					Total ¹	Residential	Commercial	Industrial	Total ¹	Residential	Commercial	Industrial
1970.....	1,392	466	307	571	1.67	2.22	2.08	1.02	3.98	5.29	4.95	2.43
1972.....	1,595	539	359	641	1.86	2.42	2.29	1.16	4.00	5.20	4.92	2.49
1973.....	1,713	579	388	686	1.96	2.54	2.41	1.25	3.96	5.13	4.87	2.53
1974.....	1,706	578	385	685	2.49	3.10	3.04	1.69	4.61	5.74	5.63	3.13
1975.....	1,747	588	403	688	2.92	3.51	3.45	2.07	4.92	5.92	5.82	3.49
1976.....	1,855	608	425	754	3.09	3.73	3.69	2.21	4.90	5.91	5.85	3.50
1977.....	1,948	645	447	786	3.42	4.05	4.09	2.50	5.08	6.02	6.08	3.71
1978.....	2,018	674	461	809	3.69	4.31	4.36	2.79	5.11	5.97	6.04	3.86
1979.....	2,071	683	473	842	3.89	4.54	4.68	3.05	5.08	5.90	5.95	3.88
1980.....	2,094	717	488	815	4.73	5.36	5.48	3.69	5.52	6.25	6.39	4.31
1981.....	2,147	722	514	826	5.46	6.20	6.28	4.29	5.61	6.80	6.69	4.56
1982.....	2,086	730	526	745	6.13	6.86	6.86	4.95	6.13	6.86	6.66	4.95
1983.....	2,151	751	544	776	6.30	7.18	7.02	4.96	6.06	6.91	6.76	4.77
1984.....	2,285	780	577	839	6.52	7.54	7.33	5.04	6.03	6.98	6.78	4.86
1985.....	2,326	794	605	835	6.71	7.79	7.47	5.16	6.02	6.99	6.70	4.63
1986.....	2,351	818	641	808	6.42	7.41	7.18	4.90	5.83	6.49	6.25	4.28
1987.....	2,455	850	672	847	6.32	7.41	7.00	4.72	5.38	6.31	5.98	4.02

¹ Includes other sectors not shown separately. ² Based on the GNP implicit price deflator; see table 751.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

Electric Utility Industry

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No. 952. ELECTRIC UTILITY INDUSTRY—ELECTRIC ENERGY NET GENERATION, AND NET SUMMER CAPABILITY BY TYPE OF PRIME MOVER, AND CONSUMPTION OF FUELS: 1970 TO 1987

[Net Generation for calendar years; other data as of December 31. See also *Historical Statistics, Colonial Times to 1970*, series S 32-52, S 78-82, and S 86-107]

ITEM	Unit	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	
NET GENERATION												
Total	Bil. kWh	1,532	1,918	2,286	2,295	2,241	2,310	2,416	2,470	2,487	2,572	
Average annual change ¹	Percent	7.3	4.6	3.6	.4	-2.3	3.1	4.6	2.2	.7	3.4	
Net generation, kWh per kW of net summer capability ²	Rate	4,554	3,903	3,952	3,836	3,652	3,720	3,805	3,771	3,734	3,809	
Investor owned.....	Bil. kWh	1,183	1,487	1,783	1,786	1,712	1,764	1,849	1,918	1,928	2,022	
Percent of total utilities	Percent	77.2	77.5	78.0	77.8	76.4	76.4	76.5	77.7	77.5	78.6	
Publicly owned.....	Bil. kWh	349	491	503	509	530	545	567	552	559	550	
Municipal.....	Bil. kWh	71	82	87	81	77	73	75	74	79	86	
Federal.....	Bil. kWh	186	221	235	232	241	258	254	233	225	205	
Cooperatives and other.....	Bil. kWh	91	128	182	196	212	215	239	245	255	258	
Source of energy:	Percent	46.0	44.6	51.0	52.7	53.4	54.8	55.9	57.2	56.2	57.4	
Coal ³	Percent	1.4	9.0	11.0	11.9	12.6	12.7	13.6	15.5	16.6	17.7	
Nuclear	Percent	12.0	15.1	10.8	9.0	6.5	6.3	5.0	4.1	5.5	4.6	
Oil	Percent	24.3	15.6	15.1	15.1	13.6	11.9	12.3	11.8	10.0	10.6	
Gas	Percent	16.2	15.6	12.1	11.4	13.8	14.4	13.3	11.4	11.7	9.7	
Type of prime mover: ⁴	Percent	Hydro	248	300	276	261	309	332	321	281	291	250
Steam conventional ⁵	Bil. kWh	1,240	1,414	1,726	1,730	1,628	1,661	1,742	1,778	1,756	1,837	
Gas turbine	Bil. kWh	16	22	24	22	14	14	15	14	14	16	
Steam nuclear	Bil. kWh	22	173	251	273	283	294	328	384	414	455	
Internal combustion	Bil. kWh	6	6	4	3	2	2	2	2	2	2	
NET SUMMER CAPABILITY												
Total ⁶	Mil. kW	336	491	579	598	614	621	635	655	665	675	
Average annual change ¹	Percent	7.2	7.9	3.4	3.4	2.6	1.2	2.3	3.2	1.5	1.6	
Hydro.....	Mil. kW	64	78	82	82	83	84	85	89	89	90	
Steam conventional ⁷	Mil. kW	248	333	397	411	421	425	431	437	441	442	
Gas turbine	Mil. kW	13	37	43	43	44	43	44	44	43	43	
Steam nuclear	Mil. kW	7	37	52	56	60	63	70	79	85	94	
Internal combustion	Mil. kW	4	5	5	5	5	5	5	5	5	5	
NUMBER OF PRIME MOVERS												
Prime movers, total ⁸	Number	9,717		11,084								
Hydro.....	Number	3,108		3,275								
Steam conventional.....	Number	2,813		2,862								
Gas turbine.....	Number	658		(NA)								
Steam nuclear.....	Number	16		1,447								
Internal combustion.....	Number	3,118		74								
CONSUMPTION OF FUELS												
Net generation by fuel ⁹	Bil. kWh	1,284	1,618	2,010	2,034	1,932	1,978	2,095	2,189	2,195	2,322	
Average annual change ¹	Percent	7.7	3.3	2.2	1.2	-5.0	2.4	5.9	4.5	.4	5.7	
Coal.....	Bil. kWh	704	853	1,162	1,203	1,192	1,259	1,342	1,402	1,386	1,464	
Percent of total	Percent	54.9	52.7	57.8	59.2	61.7	63.7	64.0	64.1	63.1	63.0	
Petroleum.....	Bil. kWh	184	289	248	206	147	144	120	100	137	118	
Gas.....	Bil. kWh	373	300	346	346	305	274	297	292	249	273	
Nuclear.....	Bil. kWh	22	173	251	273	283	294	328	384	414	455	
Fuel consumed:	Quad. Blu.	13,40	15.19	18.57	18.55	17.49	17.75	18.53	18.79	18.59	19.39	
Total energy equivalent.....	Mil. sh. tons	320	406	569	597	594	625	664	694	685	718	
Coal.....	Mil. bbl.	339	506	421	352	251	247	206	174	232	199	
Gas.....	Bil. cu. ft.	3,932	3,158	3,682	3,640	3,226	2,911	3,111	3,044	2,602	2,844	

NA. Not available. ¹Change from prior year shown; for 1970, change from 1960. For explanation of average annual percent change, see Guide to Tabular Presentation. ²Net summer capability is the steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary power as demonstrated by test at the time of summer peak demand.

³Includes small percentage (.5%) from wood and waste, geothermal, and petroleum coke. ⁴A prime mover is the engine, turbine, water wheel, or similar machine which drives an electric generator. ⁵Fossil fuels only. ⁶Includes wind, solar thermal, and photovoltaic, not shown separately. ⁷Includes fossil steam, wood, and waste. ⁸Each prime mover type in combination plants counted separately. Includes geothermal, wind, and solar, not shown separately. ⁹Includes small amounts of wood, waste, wind, geothermal, solar thermal, and photovoltaic.

Source: 1970, U.S. Federal Power Commission, *Electric Power Statistics*, and press releases; thereafter, U.S. Energy Information Administration, 1975 and 1980, *Power Production, Fuel Consumption, and Installed Capacity Data—Annual*, and unpublished data; thereafter, *Electric Power Annual, Annual Energy Review*, and unpublished data.

NO. 953. ELECTRIC UTILITY INDUSTRY—CAPABILITY, PEAK LOAD, AND CAPACITY MARGIN:
1970 TO 1987

[Excludes Alaska and Hawaii. Capability represents the maximum kilowatt output with all power sources available and with hydraulic equipment under actual water conditions, allowing for maintenance, emergency outages, and system operating requirements. Capacity margin is the difference between capability and peak load.]

YEAR	CAPABILITY AT THE TIME OF—				NON-COINCIDENT PEAK LOAD		CAPACITY MARGIN			
	Summer peak load (1,000 kW)		Winter peak load ¹ (1,000 kW)		Sum-	Win-	Summer		Winter	
	Amount	Change from prior year	Amount	Change from prior year			Amount (1,000 kW)	Percent of capability	Amount (1,000 kW)	Percent of capability
1970.....	326,900	+26,600	339,050	+27,600	274,650	248,550	52,250	16.0	90,500	26.7
1971.....	353,250	+26,350	366,700	+27,650	292,100	261,650	61,150	17.3	105,050	26.6
1972.....	381,700	+28,450	394,050	+27,350	319,150	290,950	62,550	16.4	103,100	26.2
1973.....	415,500	+33,800	433,150	+39,100	343,900	295,100	71,600	17.2	138,050	31.9
1974.....	444,400	+28,900	467,400	+34,250	349,250	302,500	95,150	21.4	164,900	35.3
1975.....	479,300	+34,900	492,450	+25,050	356,800	331,100	122,500	25.6	161,350	32.9
1976.....	498,750	+19,450	511,000	+18,550	370,900	349,850	127,850	25.6	161,150	31.5
1977.....	516,000	+17,250	537,600	+26,600	396,350	360,200	119,650	23.2	177,400	33.0
1978.....	545,700	+29,700	561,550	+23,950	408,050	383,100	135,650	24.9	178,450	31.8
1979 ³	544,506	-1,194	554,525	-7,025	398,424	368,876	146,082	26.8	185,649	33.5
1980.....	558,237	13,731	572,195	17,670	427,058	384,567	131,179	23.5	187,626	32.8
1981.....	572,219	13,982	586,569	14,374	428,295	391,106	143,924	25.2	188,769	32.2
1982.....	586,142	13,923	598,068	11,497	414,909	373,318	171,233	29.2	224,081	37.5
1983.....	598,449	10,307	612,453	14,387	447,525	410,779	148,923	25.0	201,674	32.9
1984.....	604,240	7,791	622,125	9,673	451,150	436,374	153,090	25.3	185,751	29.9
1985.....	621,597	17,357	636,475	14,350	460,503	423,660	161,094	25.9	212,815	33.4
1986.....	633,281	11,694	646,721	10,246	476,983	422,857	156,298	24.7	223,864	34.6
1987.....	647,932	14,641	662,977	16,256	493,682	448,277	154,240	23.8	214,700	32.4

¹ Prior to 1973, data was for the month of December.
² Change from 1969.
³ Beginning 1979, data are not entirely comparable with prior years due to change in data source.

Source: Edison Electric Institute, Washington, DC, *Statistical Yearbook of the Electric Utility Industry*, annual.

NO. 954. ELECTRIC ENERGY—NET GENERATION AND INSTALLED GENERATING CAPACITY, BY STATE:
1980 TO 1987

[Capacity as of Dec. 31. Covers utilities for public use]

DIVISION AND STATE	NET GENERATION (bil. kWh)			INSTALLED CAPACITY (mil. kW)		DIVISION AND STATE	NET GENERATION (bil. kWh)			INSTALLED CAPACITY (mil. kW)		
	1980	1986	1987				1980	1986	1987		1980	1987
			Total	Percent from coal	1980	1987			Total	Percent from coal		
U.S.	2,286.4	2,487.3	2,572.1	56.9	613.5	718.1	S.A.—Con.					
N.E.	78.2	87.6	87.8	19.0	21.1	22.5	VA.....	34.3	42.6	42.7	48.3	11.7
ME.....	7.9	10.9	8.3	-	2.4	2.4	WV.....	70.8	77.5	78.4	99.2	15.2
NH.....	6.0	6.1	6.0	50.5	1.6	1.4	NC.....	72.1	76.8	78.8	56.9	15.8
VT.....	3.8	3.1	4.6	-	9.1	1.1	SC.....	41.9	56.5	64.4	35.5	11.7
MA.....	34.8	34.5	34.7	33.6	9.6	10.0	GA.....	63.3	74.9	85.8	78.3	20.9
RI.....	1.0	1.1	.8	2.4	.3	.3	FL.....	95.9	108.5	110.8	49.3	29.0
CT.....	24.7	32.2	33.2	5.6	6.3	7.4	E.S.C.....	214.1	210.9	217.5	81.2	62.0
M.A.	260.5	287.7	302.3	42.4	78.4	83.8	KY.....	57.1	66.9	67.5	95.4	13.6
NY.....	108.6	111.3	117.6	16.5	31.4	33.2	TN.....	60.2	56.5	58.3	87.0	18.3
N.J.	29.4	28.8	39.3	18.9	12.6	14.7	AL.....	78.3	68.6	69.3	72.8	20.0
PA.....	122.5	147.6	145.4	69.7	34.4	35.9	MS.....	18.5	19.0	22.4	49.6	5.5
E.N.C.	397.0	414.6	439.2	78.4	107.9	120.7	W.S.C.....	313.1	341.9	343.0	47.2	84.7
OH.....	110.2	111.5	119.7	93.0	27.4	27.6	AR.....	19.7	35.1	36.3	53.4	7.2
IN.....	70.6	77.3	76.5	98.8	17.1	21.5	LA.....	45.7	52.8	51.3	29.4	12.9
IL.....	103.4	106.9	109.9	52.7	29.9	36.0	OK.....	44.6	41.1	42.7	49.4	11.3
MI.....	74.8	76.1	87.0	81.7	22.7	24.1	TX.....	203.0	212.9	212.6	50.0	53.3
WI.....	37.8	42.8	44.0	70.5	10.7	11.6	MT.....	158.8	203.1	216.1	75.3	35.8
W.N.C.	168.2	185.1	195.2	74.4	49.0	58.0	ID.....	15.5	22.4	20.9	56.7	3.2
MN.....	31.5	28.4	34.4	62.9	8.8	9.3	WY.....	9.5	12.2	8.1	-	2.0
IA.....	21.8	24.1	25.5	85.0	7.3	8.6	CO.....	23.6	28.3	28.8	90.9	6.1
MO.....	48.9	54.2	55.1	85.7	13.8	16.6	NM.....	24.7	23.6	25.6	92.4	5.0
ND.....	15.8	22.2	22.6	91.2	3.4	4.7	AZ.....	36.9	51.2	51.6	49.1	9.4
SD.....	6.6	7.8	6.3	14.4	2.2	2.6	UT.....	12.1	16.8	26.3	95.7	2.1
NE.....	16.3	18.8	20.5	49.6	5.1	5.8	NV.....	14.1	20.0	17.4	80.7	3.9
KS.....	25.1	29.5	30.8	74.9	8.3	10.5	Pac.....	278.8	273.3	265.2	3.2	71.9
S.A.	417.8	483.2	505.9	62.2	111.5	135.7	WA.....	92.3	92.5	83.8	9.8	23.0
DE.....	6.7	8.4	8.5	89.1	1.6	1.9	OR.....	36.6	47.8	39.7	-1	8.5
MD.....	32.2	37.7	38.3	57.9	9.2	10.5	CA.....	140.3	121.9	130.3	-	37.8
DC.....	.7	.2	.2	-	1.2	.9	AK.....	3.1	4.3	4.1	6.4	1.1
							HI.....	6.5	6.9	7.2	-	1.4

- Represents or rounds to zero.

Source: U.S. Energy Information Administration, 1980, *Power Production, Fuel Consumption, and Installed Capacity Data*, annual; thereafter, *Electric Power Annual* and *Inventory of Power Plants in the United States*, annual.

Electric Utility Generating Plants—Electric Energy Sales

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NO. 955. ELECTRIC UTILITY GENERATING UNITS BY PRIME MOVER AND NAMEPLATE CAPACITY: 1970 TO 1987

[Capacity as of Dec. 31. Several generating units of one or more prime movers may be located at a generating plant. For definition of prime mover, see table 952, footnote 3.]

TYPE AND SIZE OF PRIME MOVER	INVESTOR OWNED						PUBLICLY OWNED					
	Number of units			Nameplate capacity (mil. kW)			Number of units			Nameplate capacity (mil. kW)		
	1970	1980	1987	1970	1980	1987	1970	1980	1987	1970	1980	1987
Total	5,398	6,145	5,677	257.3	481.6	552.8	4,319	4,939	4,729	79.1	140.3	165.3
Steam, conventional.....												
Under 100,000 kW.....	1,943	1,987	1,689	216.8	364.8	389.3	870	875	788	37.8	64.6	81.9
1,209	990	659	45.6	40.6	32.0	-	753	684	539	12.2	13.5	13.3
100,000-500,000 kW.....	664	758	733	128.0	162.4	165.4	110	164	193	20.4	34.6	43.6
Over 500,000 kW.....	70	239	277	43.2	161.8	190.9	7	27	36	5.2	16.4	25.0
Steam, nuclear.....	15	64	97	5.8	47.1	89.5	1	10	12	1.3	8.6	12.2
Over 500,000 kW.....	7	56	91	4.4	45.4	88.0	1	9	12	1.3	8.5	12.2
Hydro.....	2,036	2,088	2,155	19.1	24.8	29.2	1,072	1,207	1,333	36.1	53.7	56.8
Gas turbine.....	587	1,171	1,122	14.0	42.1	41.8	71	276	286	1.0	9.7	10.6
Over 25,000 kW.....	115	519	511	5.7	30.0	30.4	-	127	138	1.0	7.1	8.0
Internal combustion.....	813	839	602	1.5	1.7	1.4	2,305	2,571	2,315	2.9	3.8	3.7
Under 5,000 kW.....	797	812	576	1.3	1.4	1.1	2,279	2,484	2,207	2.7	3.1	2.9
Over 5,000 kW.....	16	27	26	.2	.4	.3	26	87	108	.3	.7	.8
Other ¹	4	16	32	.1	1.0	1.6	-	-	15	-	-	.1

- Represents zero. ¹ Includes geothermal, wind, and solar.

Source: U.S. Energy Information Administration, unpublished data.

NO. 956. ELECTRIC ENERGY SALES, BY CLASS OF SERVICE, 1970 TO 1987, AND BY STATE, 1987

[In billions of kilowatthours]

YEAR, DIVISION, AND STATE	Total ¹	Residential	Com-mercial	Indus-trial	DIVISION AND STATE	Total ¹	Resi-dential	Com-mercial	Indus-trial
1970.....	1,392.3	466.3	306.7	570.9	South Atlantic.....	470.5	186.7	126.4	139.4
1973.....	1,712.9	579.2	388.3	586.1	Delaware.....	7.0	2.3	1.8	2.6
1975.....	1,747.1	588.1	403.0	687.7	Maryland ²	53.9	18.6	14.9	19.4
1980.....	2,094.4	717.5	488.2	815.1	Virginia.....	66.9	26.6	17.7	14.5
1981.....	2,147.1	722.3	514.3	825.7	West Virginia.....	21.1	7.3	4.6	8.1
1982.....	2,098.4	729.5	526.4	744.9	North Carolina.....	78.9	29.6	19.5	28.2
1983.....	2,151.0	750.9	543.8	776.0	South Carolina.....	52.0	16.8	10.3	24.0
1984.....	2,278.4	777.7	578.3	840.6	Georgia.....	68.9	25.3	18.3	24.6
1985.....	2,309.5	791.0	609.0	824.5	Florida.....	122.1	60.2	41.2	16.8
1986.....	2,350.8	817.7	641.5	808.3					
1987, total.....	2,455.4	849.6	673.7	845.3	East South Central.....	205.7	75.0	46.3	80.1
New England.....	97.0	35.0	34.3	26.0	Kentucky.....	51.3	16.3	8.9	23.8
Maine.....	10.7	3.7	2.5	4.3	Tennessee.....	70.5	27.7	18.6	23.4
New Hampshire.....	8.4	3.3	1.8	3.2	Alabama.....	56.0	19.8	11.6	24.0
Vermont.....	4.3	1.7	1.5	1.1	Mississippi.....	27.8	11.2	7.1	8.9
Massachusetts.....	42.1	14.5	16.9	9.8	West South Central.....	334.7	117.4	85.0	120.2
Rhode Island.....	5.9	2.2	2.2	1.4	Arkansas.....	23.6	9.6	5.6	7.9
Connecticut.....	25.7	9.7	9.4	6.2	Louisiana.....	59.1	19.8	12.7	29.1
Middle Atlantic.....	285.4	90.5	93.3	88.3	Oklahoma.....	36.4	14.0	9.8	10.7
New York.....	119.5	35.4	44.1	28.8	Texas.....	215.7	74.1	57.0	76.6
New Jersey.....	58.6	19.3	23.3	15.6					
Pennsylvania.....	107.2	35.8	26.0	44.0	Mountain.....	144.5	45.6	42.9	49.8
East North Central.....	426.8	130.3	99.6	180.8	Montana.....	12.6	3.4	2.6	6.4
Ohio.....	130.1	36.9	27.6	81.5	Idaho.....	16.2	5.2	4.6	7.3
Indiana.....	66.8	21.2	14.7	30.2	Wyoming.....	10.9	1.7	1.7	7.3
Illinois.....	105.0	32.2	27.7	37.7	Colorado.....	29.0	9.6	12.2	6.3
Michigan.....	79.3	24.3	16.8	33.1	New Mexico.....	12.4	3.3	3.8	4.2
Wisconsin.....	45.5	15.7	10.7	18.2	Arizona.....	36.6	13.8	11.8	8.7
West North Central.....	173.7	65.6	45.1	58.0	Utah.....	13.5	4.0	4.1	4.6
Minnesota.....	41.9	14.0	7.3	19.8	Nevada.....	13.1	4.6	2.0	6.0
Iowa.....	27.2	10.3	6.0	10.2	Pacific.....	317.4	103.5	98.9	102.6
Missouri.....	50.0	20.4	15.9	12.9	Washington.....	78.0	26.0	16.7	31.7
North Dakota.....	6.8	2.8	1.4	2.0	Oregon.....	38.5	13.8	10.5	14.0
South Dakota.....	6.1	2.8	1.2	1.7	California.....	190.3	60.5	68.2	53.3
Nebraska.....	16.8	6.6	4.9	4.0	Alaska.....	3.4	1.2	1.6	.5
Kansas.....	24.9	8.7	6.4	7.4	Hawaii.....	7.2	2.0	1.9	3.3

¹ Includes other service, not shown separately.

² Includes District of Columbia.

Source: U.S. Energy Information Administration, *Electric Power Annual, 1987*.

NO. 957. ELECTRIC UTILITIES—GENERATION, SALES, REVENUE, AND CUSTOMERS: 1970 TO 1987

[Sales and revenue are to and from ultimate customers]

CLASS	Unit	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986, prel.	1987, prel.
Generation ¹	Bil. kWh...	1,532	1,918	2,206	2,247	2,266	2,295	2,241	2,310	2,416	2,470	2,487	2,572
Sales ²	Bil. kWh...	1,391	1,733	2,019	2,094	2,126	2,151	2,100	2,160	2,281	2,310	2,361	2,443
Residential or domestic	Bil. kWh...	448	568	679	696	724	730	733	750	783	791	822	850
Percent of total	Percent...	32.2	33.8	33.7	33.4	34.5	34.0	34.9	34.7	34.3	34.2	34.8	34.8
Commercial ³	Bil. kWh...	313	418	481	495	524	522	517	546	578	609	623	659
Industrial	Bil. kWh...	573	682	782	818	794	820	770	783	835	824	818	847
Revenue ⁴	Bil. dol ...	22.1	46.9	69.9	79.6	95.5	110.6	121.6	129.6	143.1	149.8	153.1	155.9
Residential or domestic	Bil. dol ...	9.4	18.8	27.4	30.8	37.6	42.4	47.2	51.2	56.1	59.0	61.2	63.2
Percent of total	Percent...	42.7	40.1	39.2	38.7	39.4	38.3	38.8	39.5	39.2	39.4	40.0	40.5
Commercial ³	Bil. dol ...	6.3	13.5	19.7	22.3	27.4	31.3	34.2	37.1	41.3	44.2	45.8	46.8
Industrial ⁴	Bil. dol ...	5.4	12.7	20.3	23.8	27.3	33.0	35.9	36.6	40.8	41.4	40.8	40.6
Ultimate customers, Dec. 31 ²	Million...	72.5	81.8	87.7	88.9	92.7	94.0	95.3	97.0	99.4	101.5	103.6	105.6
Residential or domestic	Million...	64.0	72.6	77.8	79.6	82.2	83.3	84.4	85.8	87.9	89.7	91.5	93.2
Commercial ³	Million...	7.9	8.5	9.1	9.4	9.7	9.8	10.0	10.3	10.6	10.7	11.2	11.5
Industrial ⁴	Million...	.4	.4	.5	.5	.5	.5	.5	.5	.5	.7	.5	.5
Avg. kWh used per customer		1,000...	19.4	21.4	23.3	23.5	23.2	23.0	22.2	22.5	23.2	23.0	23.3
Residential		1,000...	7.1	8.2	8.8	8.8	9.0	8.8	8.7	8.8	9.0	9.0	9.2
Commercial ³		1,000...	40.0	49.0	53.1	53.1	54.5	53.4	52.3	53.8	55.2	57.4	57.9
Avg. annual bill per customer	Dollar...	307	579	807	897	1,040	1,184	1,285	1,349	1,453	1,489	1,492	1,489
Residential	Dollar...	149	262	357	391	462	512	563	602	644	663	675	683
Commercial ³	Dollar...	804	1,580	2,177	2,394	2,848	3,207	3,452	3,680	3,940	4,171	4,183	4,124
Avg. revenue per kWh sold	Cents...	1.59	2.70	3.46	3.82	4.49	5.14	5.79	6.00	6.27	6.47	6.49	6.38
Residential	Cents...	2.10	3.21	4.03	4.43	5.12	5.80	6.44	6.83	7.17	7.40	7.44	7.43
Commercial ³	Cents...	2.01	3.23	4.10	4.50	5.22	6.00	6.61	6.80	7.14	7.27	7.23	7.11
Industrial ⁴	Cents...	.95	1.92	2.59	2.91	3.44	4.03	4.66	4.88	4.88	5.04	5.00	4.79

¹ Source: 1970-1975, U.S. Federal Power Commission; thereafter, U.S. Energy Information Administration, *Monthly Energy Review*, January 1988. ² Includes other types not shown separately. ³ Small light and power. ⁴ Large light and power.

Source: Except as noted, Edison Electric Institute, Washington, DC, *Statistical Yearbook*.

NO. 958. ELECTRIC UTILITIES—BALANCE SHEET AND INCOME ACCOUNT OF PRIVATELY OWNED COMPANIES: 1970 TO 1986

[In billions of dollars. As of Dec. 31. See also *Historical Statistics, Colonial Times to 1970*, series S 133-146 and V 197-212]

ITEM	CLASS A AND B INVESTOR-OWNED ELECTRIC UTILITIES ¹						MAJOR INVESTOR-OWNED ELECTRIC UTILITIES ²					
	1970	1975	1978	1979	1980	1981	1981	1982	1983	1984	1985	1986
COMPOSITE BALANCE SHEET												
Assets and other debits												
87.4	157.1	211.1	234.8	260.0	286.0	285.1	315.0	342.4	375.6	404.7	426.1	
Electric utility plant ³	93.3	160.7	218.0	242.3	266.9	292.7	291.6	321.2	347.9	377.2	396.8	419.5
Depreciation and amortization	31.9	44.5	49.7	55.5	61.5	61.1	67.6	74.3	81.9	85.1	93.7	
Net electric utility plant	73.1	128.8	173.5	192.6	211.5	231.2	230.5	253.6	273.6	295.3	311.8	325.6
Other utility plant	9.0	11.7	13.2	13.9	14.8	15.7	16.7	17.5	18.3	19.3	21.2	
Depreciation and amortization	2.1	3.1	3.9	4.2	4.5	4.9	4.9	5.3	5.8	6.1	6.5	7.2
Net other utility plant	6.9	8.6	9.3	9.7	10.3	10.8	10.8	11.4	11.8	12.2	13.4	14.0
Total utility plant	102.3	172.4	231.2	256.2	281.7	308.4	307.3	337.9	365.5	395.5	431.1	455.9
Depreciation and amortization	22.3	35.0	48.4	53.9	60.0	66.4	66.0	72.9	80.1	88.0	97.4	107.7
Net total utility plant	79.9	137.4	182.8	202.3	221.7	242.0	241.3	265.0	285.4	307.3	338.6	348.2
Other property and investments	1.7	4.5	6.4	6.0	6.5	7.9	7.9	9.1	10.3	10.9	12.1	13.5
Current and accrued assets	5.3	13.9	18.5	22.4	26.2	28.7	28.6	31.7	33.3	37.9	39.4	38.4
Deferred debitis .....	.4	1.7	3.0	4.1	5.5	7.3	7.3	9.3	13.4	19.3	19.4	26.1
Liabilities and other credits ⁴	87.4	157.1	211.1	234.8	260.0	286.0	285.1	315.0	342.4	375.6	404.7	426.1
Capital stock	20.8	37.8	49.1	53.8	59.3	63.9	63.7	70.3	75.9	79.0	82.8	81.6
Other paid-in capital	4.4	11.5	17.9	19.4	21.5	24.0	23.9	27.7	31.0	33.3	35.5	37.8
Retained earnings	9.4	14.7	19.4	21.0	22.7	25.0	24.8	27.9	31.9	37.1	41.1	46.0
Subsidiary earnings ⁵	(X)	.6	.9	1.0	1.1	1.3	1.3	1.6	1.7	2.0	2.2	2.3
Long-term debt	41.9	70.8	88.3	95.7	105.3	115.5	115.2	124.0	131.6	140.7	152.7	157.2
Current and accrued liabilities	7.3	13.7	18.3	23.4	26.3	28.4	26.1	28.6	29.5	32.0	32.3	34.0
Deferred credits and operating reserves .....	.9	2.7	7.1	8.7	9.8	11.5	11.0	15.1	16.6	19.0	20.9	22.4
Deferred income taxes ⁶	2.2	5.4	10.0	11.9	14.1	16.7	16.6	19.4	23.6	28.1	32.7	39.6
COMPOSITE INCOME ACCOUNTS												
Electric operating revenues	19.8	44.6	65.4	72.9	87.1	102.3	101.7	109.3	116.7	128.3	135.3	136.3
Electric operating expenses	15.3	36.1	54.3	61.0	73.4	86.0	85.5	91.1	96.2	105.5	111.1	110.2
Net electric operating revenues	4.5	8.5	11.1	11.8	13.6	16.3	16.2	18.1	20.5	22.8	24.1	26.1
Other utility operating income .....	.4	.5	.7	.7	.9	.7	.9	.9	.9	1.1	1.2	1.1
Total utility operating income	4.9	9.0	11.7	12.5	14.4	17.0	17.0	19.1	21.4	24.0	25.3	27.2
Other income .....	.8	2.2	2.5	3.1	3.6	4.4	4.4	5.3	6.5	6.8	7.4	7.2
Total income	5.7	11.3	14.3	15.6	18.0	21.4	21.3	24.4	28.0	30.8	32.7	34.4
Income deductions	2.3	5.1	5.5	6.1	7.3	8.7	8.7	9.4	10.1	11.1	14.0	14.0
Net income ⁷	3.4	6.1	8.7	9.5	10.7	12.7	12.7	15.0	17.9	19.7	18.7	20.4

X Not applicable. ¹ There were 197 utilities of this type in 1983. ² There were 182 utilities of this type in 1986.

³ Includes construction work in progress. ⁴ Includes contributions in aid of construction through 1970.

⁵ Unappropriated undistributed. ⁶ Cumulative. ⁷ Beginning 1975, includes net extraordinary income.

Source: 1970-1975, U.S. Federal Power Commission and 1978-1981, U.S. Energy Information Administration, *Statistics of Privately Owned Electric Utilities in the United States*, annual; thereafter, U.S. Energy Information Administration, *Financial Statistics of Selected Electric Utilities*, annual.

Nuclear Power Plants—Uranium Supply

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No. 959. NUCLEAR POWER PLANTS—NUMBER, CAPACITY, AND GENERATION: 1965 TO 1987

ITEM	1965	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987, prel.
Operable generating units ¹	6	18	54	68	70	74	77	80	86	95	100	107
Net summer capability ^{1,2} (mil. kW).....	.8	7.0	37.2	49.6	51.7	55.9	59.9	63.0	69.7	79.4	85.2	93.7
Electricity generated (bil. kWh).....	4	22	173	255	251	273	283	294	328	384	414	455
Percent of total electric utility generation.....	.4	1.4	9.0	11.4	11.0	11.9	12.6	12.7	13.6	15.5	16.6	17.7
Capacity factor ³	(NA)	(NA)	56.0	58.5	56.4	58.4	58.7	54.4	58.3	57.9	56.9	57.4

NA Not available. ¹ As of yearend. ² Net summer capability is the peak steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary and other powerplant, as demonstrated by test at the time of summer peak demand. ³ Weighted average of monthly capacity factors. Monthly factors are derived by dividing actual monthly generation by the maximum possible generation for the month (hours in month times net maximum dependable capacity).

Source: U.S. Energy Information Administration, *Annual Energy Review*.

No. 960. COMMERCIAL NUCLEAR POWER GENERATION, BY COUNTRY: 1970 TO 1987

[Generation for calendar years; other data as of December. Excludes Communist countries]

COUNTRY	REACTORS				ELECTRICITY GENERATED ¹ (bil. kWh)				GROSS CAPACITY (1,000 kW)			
	1970	1980	1985	1987	1970	1980	1985	1987	1970	1980	1985	1987
Total.....	64	208	295	339	73.9	817.8	1,259.8	1,491.7	15,186	128,847	223,486	271,145
U.S.....	15	74	89	108	23.2	285.2	399.1	480.9	5,211	56,529	80,327	99,702
Argentina.....	-	1	2	2	-	2.3	4.8	6.5	-	357	1,005	1,005
Belgium.....	1	3	7	7	.3	12.5	34.5	42.0	11	1,744	5,709	5,718
Brazil.....	-	-	1	1	-	-	3.4	.1	-	-	657	657
Canada.....	1	9	15	18	.8	40.4	62.9	80.6	220	5,588	10,332	12,884
China: Taiwan.....	-	2	8	6	-	8.2	28.7	33.1	-	1,272	5,146	5,146
Great Britain.....	27	33	37	38	26.5	37.2	59.6	56.2	4,783	9,012	12,280	12,940
Finland.....	-	4	4	4	-	7.0	18.8	19.4	-	2,298	2,400	2,400
France.....	4	22	44	53	5.7	61.2	224.0	265.5	1,806	15,412	38,595	52,095
India.....	2	4	5	6	2.2	2.9	4.4	5.5	400	860	1,095	1,330
Italy.....	3	4	3	3	3.3	2.2	7.0	.2	631	1,490	1,330	1,330
Japan.....	3	22	33	36	3.3	81.0	152.0	188.2	828	15,117	24,866	28,046
Netherlands.....	1	2	2	2	.4	4.2	3.9	3.6	55	529	540	540
Pakistan.....	-	1	1	1	-	.1	.3	.3	-	137	137	137
South Africa.....	-	-	2	2	-	-	5.7	6.6	-	-	1,930	1,890
South Korea.....	-	1	4	7	-	3.5	18.5	37.8	-	587	2,866	5,808
Spain.....	1	3	8	8	.9	5.2	28.0	41.2	160	1,117	5,812	5,812
Sweden.....	1	8	12	12	(z)	26.7	58.6	67.2	12	5,770	9,915	10,095
Switzerland.....	1	4	5	5	1.9	14.3	22.4	23.0	364	2,034	3,079	3,079
West Germany.....	4	11	16	19	5.3	43.7	125.7	130.5	907	6,996	16,912	19,848
Yugoslavia.....	-	-	1	1	-	-	4.1	4.5	-	-	664	664

- Represents zero. Z Less than 50 million kWh. ¹ Gross.

Source: McGraw-Hill, Inc., New York, NY, *Nucleonics Week*, January issues. (Copyright.)

No. 961. URANIUM SUPPLY, ENRICHMENT, AND DISCHARGED COMMERCIAL REACTOR FUEL:

1970 TO 1987

[Years ending Dec. 31, except as noted. For explanation of kilogram, see weights and measures]

ITEM	Unit	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
URANIUM (U_3O_8)											
Production.....	Mil. lb.	25.81	23.20	49.70	38.47	26.87	21.16	14.88	11.31	13.51	13.01
Exports.....	Mil. lb.	4.20	1.00	5.80	4.40	6.20	3.30	2.20	5.30	1.60	1.09
Imports.....	Mil. lb.	-	1.40	3.60	6.60	17.10	8.20	12.50	11.70	13.50	14.80
Delivered price.....	Dol./lb.	(NA)	10.50	26.00	32.20	39.37	38.21	32.65	31.43	30.01	27.97
ENRICHMENT											
Enriched product ¹	Mil. Swu ²	5.10	9.92	10.69	11.50	12.36	8.46	11.2	10.2	8.8	8.1
For domestic customers.....	Mil. Swu ²	3.74	4.36	6.89	7.19	6.69	3.469	4.58	4.80	4.49	4.34
For foreign customers.....	Mil. Swu ²	1.36	5.56	3.80	4.31	5.67	3.77	4.54	4.42	4.37	4.47
Sales.....	Mil. dol.	(NA)	376	1,378	1,445	2,185	2,329	4,1457	4,1,403	4,1,085	4,921
DISCHARGED COMMERCIAL REACTOR FUEL³											
Annual discharge.....	Metric tons.....	82	499	1,193	1,077	1,014	1,224	1,257	1,330	1,431	1,615
Inventory, yearend ⁴	Metric tons.....	118	1,538	6,434	7,511	8,525	9,749	11,006	12,481	13,881	(NA)
On-site storage.....	Metric tons.....	(NA)	(NA)	(NA)	7,032	8,046	9,300	10,642	11,953	13,267	(NA)
Off-site storage.....	Metric tons.....	(NA)	(NA)	(NA)	479	479	449	384	528	614	(NA)

- Represents zero. NA Not available. ¹ Based on sales. ² Separative work units. The standard measure of enrichment services is based on operating tails assay in effect at the time the enriched product was placed in inventory.

³ Jan.-Sept. only. ⁴ Fiscal years. ⁵ Uranium content. Source: Nuclear Assurance Corporation, Atlanta, GA. ⁶ Recovered fuel not included as inventory.

Source: Except as noted, U.S. Energy Information Administration, *Annual Energy Review*, *Uranium Industry Annual* and unpublished data.

NO. 962. NUCLEAR POWER PLANTS—NUMBER OF UNITS, NET SUMMER CAPABILITY, AND NET GENERATION, BY STATE: 1987

DIVISION AND STATE	Number of units	NET SUMMER CAPABILITY		NET GENERATION		DIVISION AND STATE	Number of units	NET SUMMER CAPABILITY		NET GENERATION	
		Nu-clear, total (mil. kW)	Percent of total ¹	Nu-clear, total (mil. kWh)	Percent of total ¹			Nu-clear, total (mil. kW)	Percent of total ¹	Nu-clear, total (mil. kWh)	Percent of total ¹
U.S.	107	93.6	13.9	455,270	17.7	So. Atl.—Con.	—	—	—	—	—
N. Eng.	8	5.4	24.4	29,256	33.3	WV	—	—	28,600	36.3	—
ME	1	.8	35.8	4,043	48.4	NC	5	4.7	23.7	39,290	61.0
NH	—	—	—	—	SC	7	6.4	43.0	—	—	—
VT	1	.5	45.3	3,536	76.9	GA	3	2.6	13.9	15,259	17.8
MA	2	.8	8.5	1,136	3.3	FL	5	3.7	11.7	18,773	16.9
RI	—	—	—	—	E. So. Cent.	8	8.3	14.3	18,857	8.7	—
CT	4	3.2	45.3	20,540	61.9	KY	—	—	—	—	—
Mid. Atl.	18	16.3	21.3	80,606	26.7	TN	2	2.3	13.5	2—108	(X)
NY	6	4.8	15.6	22,926	19.5	AL	5	4.9	25.8	11,248	16.2
NJ	4	3.9	28.8	22,697	57.7	MS	1	1.1	16.5	7,717	34.5
PA	8	7.7	23.7	34,982	24.1	W. So. Cent.	4	3.7	3.8	23,693	5.9
E. No. Cent.	22	19.1	17.3	83,407	19.0	AR	2	1.7	17.8	11,369	31.3
OH	2	2.0	7.9	7,513	6.3	LA	2	2.0	11.8	12,324	24.0
IN	—	—	—	—	OK	—	—	—	—	—	—
IL	12	11.5	36.1	50,194	45.7	TX	—	—	—	—	—
MI	5	4.0	17.9	14,389	16.5	Mt.	4	4.0	8.2	13,632	6.3
WI	3	1.5	13.7	11,311	25.7	MT	—	—	—	—	—
W. No. Cent.	8	5.6	10.4	35,421	18.1	ID	—	—	—	—	—
MN	3	1.6	18.1	11,554	33.6	WY	—	—	—	—	—
IA	1	.5	6.4	2,523	9.9	CO	1	.2	3.1	174	.6
MO	1	1.2	7.7	6,284	11.4	NM	3	3.8	26.2	13,458	26.1
ND	—	—	—	—	AZ	—	—	—	—	—	—
SD	—	—	—	—	UT	—	—	—	—	—	—
NE	2	1.2	22.7	8,589	41.9	NV	—	—	—	—	—
KS	1	1.1	11.9	6,471	21.0	Pac.	9	8.7	10.4	40,283	15.2
So. Atl.	26	22.6	18.0	130,137	25.7	WA	2	1.9	7.8	5,528	5.6
DE	—	—	—	—	OR	1	1.1	9.8	4,348	10.9	
MD	2	1.7	17.2	10,070	27.8	CA	6	5.6	12.6	30,387	23.3
DC	—	—	—	—	AK	—	—	—	—	—	—
VA	4	3.4	26.4	18,145	42.5	HI	—	—	—	—	—

[—] Represents zero. ^X Not applicable. ¹ For total capability and generation, see table 954. ² Negative generation denotes that electric power consumed for plant use exceeds gross generation.

Source: U.S. Energy Information Administration, *Electric Power Annual*, and *Inventory of Power Plants in the United States 1987*.

NO. 963. PRIVATELY OWNED GAS UTILITY INDUSTRY—BALANCE SHEET AND INCOME ACCOUNT: 1970 TO 1986

In millions of dollars. The gas utility industry consists of pipeline and distribution companies. Excludes operations of companies distributing gas in bottles or tanks. See also *Historical Statistics, Colonial Times to 1970*, series S 205-218]

ITEM	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986
COMPOSITE BALANCE SHEET										
Assets, total ¹	34,929	50,286	70,245	75,725	86,894	95,003	100,499	98,933	104,478	104,011
Total utility plant	38,641	49,384	62,710	66,767	72,917	78,479	82,038	83,118	88,121	91,867
Depreciation and amortization	10,695	16,779	24,400	26,062	28,908	31,388	34,208	35,542	36,377	36,804
Utility plant (net)	27,845	32,605	38,310	40,705	44,009	47,091	47,380	47,576	51,744	54,863
Investment and fund accounts ¹	3,024	9,198	14,097	15,625	19,388	20,750	21,531	21,872	23,871	21,828
Current and accrued assets	3,674	7,543	15,427	17,211	20,563	23,576	27,571	25,367	24,771	21,477
Deferred debitis ²	386	940	2,411	2,184	2,954	3,586	3,587	4,118	4,092	5,843
Liabilities, total ¹	34,929	50,286	70,245	75,725	86,894	95,003	100,499	98,933	104,478	104,011
Capitalization, total ¹	28,646	39,044	48,165	51,299	57,512	62,390	65,040	64,458	65,799	66,691
Capital stock ¹	12,985	19,500	27,135	29,262	33,041	36,161	38,486	38,959	39,517	39,801
Long-term debts	15,681	19,544	21,030	22,037	24,471	26,229	26,552	25,499	26,282	26,790
Current and accrued liabilities	4,832	8,158	16,024	18,107	22,134	23,809	25,150	23,043	26,125	23,815
Deferred income taxes ³	788	2,052	3,798	4,144	4,972	5,473	6,537	7,000	7,769	8,365
Other liabilities and credits	663	1,032	2,257	2,175	2,276	3,331	3,772	4,432	4,785	5,140
COMPOSITE INCOME ACCOUNT										
Operating revenues, total	16,380	30,550	66,931	85,807	101,593	115,673	116,098	115,491	103,945	80,971
Operating expenses ⁴	14,306	27,480	62,887	81,517	96,917	110,259	110,142	109,165	98,920	75,468
Operation and maintenance	11,636	22,957	56,281	74,433	89,108	101,548	100,495	98,953	88,572	66,053
Federal, State, and local taxes	1,569	2,763	4,294	4,653	5,056	5,694	6,508	7,146	6,590	6,109
Operating income	2,074	3,070	4,043	4,290	4,676	5,414	5,954	6,326	5,825	5,503
Utility operating income	2,158	3,221	4,296	4,633	5,087	5,819	6,303	6,647	6,030	5,936
Income before interest charges ¹	2,457	4,137	6,303	7,112	8,369	8,742	8,717	9,068	7,836	7,071
Net income ¹	1,427	2,502	4,208	4,377	5,145	5,072	5,158	5,619	3,785	3,380
Dividends	1,006	1,509	2,362	2,566	3,064	3,297	3,638	4,471	4,060	3,882

¹ Beginning 1975, not comparable with 1970 due to Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries. ² Includes capital stock discount and expense and reacquired securities.

³ Includes reserves for deferred income taxes. ⁴ Includes expenses not shown separately.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual. (Copyright.)

Gas Utility Industry

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No. 964. GAS UTILITY INDUSTRY—SUMMARY: 1970 TO 1986

[Covers natural, manufactured, mixed, and liquid petroleum gas. Based on questionnaire mailed to all privately and municipally owned gas utilities in U.S., except those with annual revenues less than \$25,000. See also *Historical Statistics, Colonial Times to 1970*, series S 190-204.]

ITEM	Unit	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986
Customers ¹		1,000	41,482	44,555	46,478	47,225	47,947	48,415	48,799	49,325	49,971
Residential.....		1,000	38,097	40,950	42,821	43,489	44,149	44,552	44,894	45,367	45,929
Commercial.....		1,000	3,131	3,567	3,423	3,500	3,584	3,631	3,678	3,730	3,816
Industrial and other.....		1,000	254	237	234	236	234	232	228	228	226
Sales ²		Tril. Btu ³	16,044	14,863	15,440	15,413	15,375	14,183	12,658	13,162	12,616
Residential.....		Tril. Btu	4,923	4,991	5,083	4,826	4,610	4,770	4,450	4,628	4,513
Percent of total.....		Percent	30.7	33.6	32.9	31.3	30.0	33.6	34.6	35.2	35.8
Commercial.....		Tril. Btu	2,007	2,387	2,486	2,453	2,376	2,471	2,298	2,396	2,338
Industrial.....		Tril. Btu	8,439	6,837	7,555	7,957	8,239	6,795	5,970	5,991	5,635
Other.....		Tril. Btu	674	648	316	177	150	147	140	147	130
Revenues ²		Mil. dol.	10,283	19,101	38,947	48,303	56,110	63,200	65,837	67,496	63,293
Residential.....		Mil. dol.	5,207	8,445	14,833	17,432	19,180	23,700	26,173	27,485	26,864
Percent of total.....		Percent	50.6	44.2	39.1	36.1	34.2	37.5	39.8	40.7	42.4
Commercial.....		Mil. dol.	1,620	3,302	6,624	8,183	9,286	11,686	12,659	13,205	12,722
Industrial.....		Mil. dol.	3,181	6,745	16,961	22,215	27,124	27,200	26,315	26,094	23,086
Other.....		Mil. dol.	274	608	530	473	520	634	690	712	621
Prices per mil. Btu ³		Dollars.....	.64	1.29	2.52	3.13	3.65	4.46	5.12	5.13	5.02
Residential.....		Dollars	1.06	1.69	2.92	3.61	4.16	4.97	5.88	5.94	5.85
Commercial.....		Dollars	.81	1.38	2.66	3.34	3.91	4.72	5.51	5.51	5.03
Industrial.....		Dollars	.38	.99	2.24	2.79	3.29	4.00	4.41	4.36	4.10
Gas mains mileage			913	980	1,030	1,052	1,070	1,083	1,095	1,102	1,119
Field and gathering.....			1,000	66	68	78	84	86	90	92	94
Transmission.....			1,000	252	263	268	270	272	273	272	271
Distribution.....			1,000	595	649	688	702	714	721	730	736
Construction expenditures ⁴		Mil. dol.	2,506	2,486	4,386	5,350	6,389	5,939	4,078	4,645	5,671
Transmission.....		Mil. dol.	1,019	590	1,226	1,583	2,352	1,921	1,065	1,301	1,562
Distribution.....		Mil. dol.	913	910	1,448	1,869	2,995	1,881	1,845	2,266	2,577
Production and storage.....		Mil. dol.	370	831	1,406	1,546	1,672	1,690	746	543	965

¹ Annual average. ² Excludes sales for resale. ³ For definition, see text, section 19. ⁴ Includes general.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual. (Copyright.)

No. 965. GAS UTILITY INDUSTRY—CUSTOMERS, SALES, AND REVENUES, BY STATE: 1986

[See headnote, table 964]

DIVISION AND STATE	CUSTOMERS ¹ (1,000)		SALES ³ (tril. Btu ⁴)		REVENUES ³ (mil. dol.)		DIVISION AND STATE	CUSTOMERS ¹ (1,000)		SALES ³ (tril. Btu ⁴)		REVENUES ³ (mil. dol.)	
	Total ²	Residential	Total ²	Residential	Total ²	Residential		Total ²	Residential	Total ²	Residential	Total ²	Residential
U.S.	50,710	46,588	11,126	4,380	51,194	24,750	So. Atl.—Conn.	555	527	125	47	669	306
N. Eng.	1,873	1,711	315	157	2,054	1,187	VA	387	355	72	40	400	241
ME.	15	12	3	1	18	5	WV	457	412	130	32	608	205
NH.	59	51	11	5	68	35	NC	325	291	93	18	422	114
VT.	19	17	5	2	27	12	SC	1,247	1,154	237	90	1,222	579
MA.	1,149	1,056	190	97	1,200	699	GA	463	421	240	14	701	98
RI.	189	174	28	15	190	121	FL						
CT.	441	401	79	37	551	317	E. So. Cent.	2,315	2,083	523	173	2,293	917
Mid. Atl.	8,453	7,811	1,416	783	8,628	5,262	KY	648	587	120	61	545	294
NY.	4,051	3,774	589	339	3,833	2,498	TN	564	488	145	41	615	197
NJ.	2,002	1,802	331	164	1,998	1,149	AL	698	644	155	46	719	288
PA.	2,400	2,235	497	260	2,797	1,615	MS	405	364	103	25	414	138
E. No. Cent.	11,262	10,369	2,615	1,383	12,864	7,379	W. So. Cent.	5,869	5,354	2,042	363	6,865	1,827
OH.	2,824	2,611	577	340	3,033	1,882	AR	533	471	112	38	411	160
IN.	1,330	1,214	337	144	1,572	776	LA	990	923	207	58	781	316
IL.	3,386	3,106	871	450	3,955	2,197	OK	898	810	158	69	621	328
MI.	2,592	2,408	571	337	2,965	1,839	TX	3,448	3,150	1,566	200	5,052	1,023
WI.	1,130	1,030	259	112	1,340	686	Mt.	3,092	2,799	507	233	2,270	1,172
W. No. Cent.	4,425	3,986	1,034	435	4,357	2,108	MT	189	167	37	18	156	75
MN.	935	847	235	103	1,069	535	ID	119	102	21	8	107	47
IA.	766	683	199	75	826	376	WY	126	113	30	12	125	58
MO.	1,254	1,157	242	124	1,104	624	CO	1,044	933	165	81	759	405
ND.	95	83	21	9	103	49	NM	375	337	80	27	267	141
SD.	111	99	23	11	105	54	AZ	584	548	71	26	338	158
NE.	469	407	103	43	414	197	UT	433	403	92	49	360	216
KS.	794	710	211	70	727	272	NV	212	195	32	12	158	72
So. Atl.	4,516	4,122	1,072	330	5,096	2,146	Pac.	8,906	8,355	1,602	544	8,768	2,751
DE.	87	81	22	7	115	49	WA	414	363	117	32	552	191
MD.	809	750	123	69	755	457	OR	312	272	64	20	321	126
DC.	146	131	30	13	204	97	CA	8,071	7,626	1,376	480	5,750	2,386
							AK	76	65	42	12	107	39
							HI	33	29	3	1	37	9

¹ Averages for the year. ² Includes other service, not shown separately. ³ Excludes sales for resale. ⁴ For definition, see headnote, table 926.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual. (Copyright.)

Energy

NO. 966. WOOD ENERGY CONSUMPTION, BY REGION AND SECTOR: 1980 TO 1984

[In trillions of Btu, except percent. For composition of regions, see fig. 1, inside front cover]

YEAR	Total	Percent of total energy consumption	REGION				SECTOR			Electric utilities
			North-east	Mid-west	South	West	Residential	Industrial	Commercial	
1980.....	2,483	3.2	386	329	1,380	388	859	1,600	21	4
1981.....	2,412	3.2	389	331	1,291	402	869	1,519	21	3
1982.....	2,395	3.3	351	339	1,334	372	937	1,434	22	3
1983.....	2,556	3.5	369	318	1,471	396	925	1,606	22	3
1984.....	2,633	3.4	349	341	1,482	461	923	1,679	22	9

NO. 967. HOUSEHOLDS THAT BURN WOOD: 1980 TO 1984

[Data are not available for 1983. Based on Residential Energy Consumption Survey; see Appendix III]

ITEM	Unit	HOUSEHOLDS THAT BURN WOOD				HOUSEHOLDS THAT BURN WOOD AS MAIN HEATING FUEL			
		1980	1981	1982	1984	1980	1981	1982	1984
Number of households.....	Millions.....	21.6	22.8	21.4	22.9	4.7	5.3	5.6	6.4
Percent of all households.....	Percent.....	26.4	27.4	25.6	26.6	5.8	6.4	6.7	7.5
Number of cords burned.....	Millions.....	42.7	44.0	48.6	49.0	22.4	24.7	28.7	29.4
Average number per household.....	Number.....	2.0	1.9	2.3	2.1	4.7	4.6	5.1	4.8
Median number per household.....	Number.....	.7	1.0	1.0	1.0	3.3	3.0	4.0	4.0
Wood energy consumption.....	Tril. Btu.....	854	881	971	981	448	493	574	589

Source of tables 966 and 967: U.S. Energy Information Administration, *Annual Energy Review*.

NO. 968. WATER POWER—DEVELOPED AND UNDEVELOPED CAPACITY, BY DIVISION: 1950 TO 1987

[In millions of kilowatts. As of Dec. 31. Excludes Alaska and Hawaii for 1950 and all capacity of reversible equipment at pumped storage projects. Also excludes capacity precluded from development due to wild and scenic river legislation. For composition of division, see fig. 1, inside front cover. See also *Historical Statistics, Colonial Times to 1970*, series S 160-175]

DIVISION	DEVELOPED INSTALLED CAPACITY							ESTIMATED UNDEVELOPED CAPACITY						
	1950	1960	1970	1980	1985	1986	1987	1950	1960	1970	1980	1985	1986	1987
U.S.	18.7	33.2	52.0	64.4	66.8	69.6	70.8	87.6	114.2	128.0	129.9	76.4	74.4	76.1
New England.....	1.2	1.5	1.5	1.5	1.7	1.7	1.8	3.3	2.9	3.3	4.7	4.4	4.3	4.3
Middle Atlantic.....	1.7	2.5	4.3	4.3	4.5	4.6	4.7	6.6	7.6	4.5	5.1	5.4	5.2	5.8
E. No. Central.....	.9	.9	.9	.9	1.1	1.1	1.1	2.3	3.0	1.6	2.0	1.8	1.8	1.8
W. No. Central.....	.6	1.6	2.7	2.8	2.9	3.0	3.0	5.8	6.4	4.4	3.4	3.1	3.0	3.1
South Atlantic.....	2.8	3.8	5.3	5.9	6.5	6.7	6.7	8.2	8.4	9.6	9.6	7.4	7.3	7.2
E. So. Central.....	2.7	3.8	5.2	5.6	5.9	5.9	5.9	4.7	4.6	3.8	3.3	2.7	2.9	2.4
W. So. Central.....	.5	1.9	2.3	2.3	2.3	2.3	2.3	3.6	3.9	3.3	4.7	5.4	5.2	5.2
Mountain.....	2.3	4.6	6.2	7.4	8.1	8.2	8.3	23.4	23.6	26.7	34.2	19.4	19.2	20.0
Pacific.....	6.0	13.6	23.9	33.7	35.8	36.1	37.0	29.8	53.8	70.9	62.9	26.8	26.1	26.3

Source: U.S. Federal Energy Regulatory Commission, (formerly U.S. Federal Power Commission), *Hydroelectric Power Resources of the United States, Developed and Undeveloped*, January 1, 1984; and unpublished data.

NO. 969. SOLAR COLLECTOR SHIPMENTS, BY TYPE, END-USE, AND MARKET SECTOR: 1974 TO 1988

[In thousands of square feet, except number of manufacturers. Solar collector is a device for intercepting sunlight, converting the sunlight to heat, and carrying the heat to where it will be either used or stored. 1985 data are not available]

YEAR	Number of manufacturers	Total shipments ¹	COLLECTOR TYPE		END USE			MARKET SECTOR		
			Low temperature	Medium temperature, special, other	Pool heating	Hot water	Space heating	Residential	Commercial	Industrial
1974	45	1,274	1,137	137	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1975	131	3,743	3,026	717	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1976	186	5,801	3,875	1,925	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1977	321	10,312	4,743	5,569	6,334	1,713	1,598	7,976	1,880	105
1978	340	10,860	5,872	4,988	5,970	2,513	1,736	6,095	1,848	263
1979	349	14,251	8,395	5,857	8,551	2,958	1,722	11,387	2,015	314
1980	233	19,398	12,233	7,165	12,029	4,790	1,688	16,077	2,417	488
1981	203	20,133	8,677	11,456	9,781	7,204	2,017	15,773	2,581	1,518
1982	265	18,821	7,476	11,145	7,035	7,444	2,367	13,729	3,789	560
1983	203	16,828	4,853	11,975	4,839	9,323	2,082	11,780	3,038	1,665
1984	224	16,419	4,479	11,939	4,427	8,930	2,370	13,980	2,091	289
1986 ²	97	4,682	3,751	1,111	3,494	1,181	127	4,131	703	13

NA Not available. ¹Includes other end uses and market sectors not shown separately. ²Declines between 1984 and 1986 are primarily due to the expiration of the Federal energy tax credit and industry consolidation.Source: U.S. Energy Information Administration, *Solar Collector Manufacturing Activity*, annual.

Section 20

Science

This section presents statistics on scientific, engineering, and technological resources, with emphases on patterns of research and development (R&D) funding and on scientific, engineering, and technical personnel, education, and employment. Also included are statistics on space program outlays and accomplishments. Principal sources of these data are the National Science Foundation (NSF) and the National Aeronautics and Space Administration (NASA).

NSF gathers data chiefly through recurring surveys. Current NSF publications containing data on funds for research and development and on scientific and engineering personnel include the *Science Resources Studies Highlights* summaries series; and annual, biennial, triennial, and special reports. Titles or the areas of coverage of some of these reports are as follows: *Science and Engineering Indicators*; *National Patterns of Science and Technology Resources*; *Science and Engineering Personnel—A National Overview*; *Women and Minorities in Science and Engineering*; science and technology data presented in chart and tabular form in a pocket-size publication; *International Science and Technology Resources Data Update*; profiles on human resources and funding in individual fields of science and engineering; *Federal R&D Funds for Research and Development*; *Federal R&D Funding by Budget Function*; *Federal Support to Universities, Colleges, and Selected Nonprofit Institutions*; *Geographic Distribution of Industrial R&D Expenditures*; *Research and Development in Industry*; R&D funds and graduate enrollment and support in academic science and engineering; characteristics of doctoral scientists and engineers and of recent graduates in the United States; *U.S. Scientists and Engineers*; and scientists, engineers, and technicians in manufacturing, nonmanufacturing, and trade and regulated industries. Statistical surveys in these areas pose particularly difficult problems of concept and definition and the data should, therefore, be regarded as broad estimates rather than precise quantitative statements. Detailed discussions of the scope and limitations of the data appear in the publications.

The National Science Board's biennial *Science Indicators* publication contains data and analyses of international and domestic science and technology, including measures of inputs and outputs. *The Budget of the United States Government*, published by the U.S. Office of Management and Budget, contains summary financial data on Federal R&D programs.

Research and development outlays.—NSF defines research as a "systematic and intensive study directed toward a fuller knowledge of the subject studied" and development as "the systematic use of scientific knowledge directed toward the production of useful materials, devices, systems, methods, or processes." National coverage of R&D expenditures is developed primarily from periodic surveys in four principal economic sectors: (1) *Government*, made up primarily of Federal executive agencies; (2) *industry*, consisting of manufacturing and nonmanufacturing firms and the federally funded research and development centers (FFRDCs) they administer; (3) *universities and colleges*, composed of universities, colleges, and their affiliated institutions, agricultural experiment stations, and associated schools of agriculture, and FFRDCs administered by educational institutions; and (4) *other nonprofit institutions*, consisting of such organizations as private philanthropic foundations, nonprofit research institutes, voluntary health agencies, and FFRDCs administered by nonprofit organizations. The R&D funds reported consist of current operating costs, including planning and administration costs, except as otherwise noted. They exclude funds for routine testing, mapping and surveying, collection of general-purpose data, dissemination of scientific information, and training of scientific personnel.

Scientists, engineers, and technicians.—Scientists and engineers are defined as persons engaged in scientific and engineering work at a level requiring a knowledge of sciences equivalent at least to that acquired through completion of a 4-year college course. Technicians are defined as persons engaged in technical work at a level requiring knowledge acquired through a technical institute, junior college, or other type of training less extensive than 4-year college training. Craftsmen and skilled workers are excluded.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

No. 970. RESEARCH AND DEVELOPMENT (R&D)—OUTLAYS: 1955 TO 1987

(Includes basic research, applied research, and development. Defense-related outlays comprise all research and development spending by Dept. of Defense, including space activities, and a portion of Department of Energy funds. Space-related outlays are those of the National Aeronautics and Space Administration; they exclude space activities of other Federal agencies, estimated at less than 5 percent of all space research and development spending. Minus sign (—) indicates decrease)

YEAR OR PERIOD	CURRENT DOLLARS (bil. dol.)			CONSTANT (1982) DOLLARS ¹	ANNUAL PERCENT CHANGE ²	PERCENT OF TOTAL R&D OUTLAYS							
	Total	De- fense space relat- ed	Other			Federally funded defense/space- related	Space	Total	Non- Feder- al	Fed- eral			
				Total	De- fense	Space	Total	Non- Feder- al	Fed- eral				
1955.....	6.2	3.0	3.1	22.8	1.5	9.4	6.1	49	48	1	51	43	8
1960.....	13.5	7.4	6.1	43.6	2.6	13.8	11.4	55	52	3	45	35	9
1961.....	14.3	8.0	6.3	45.8	2.7	5.9	4.8	56	50	6	44	35	9
1962.....	15.4	8.5	6.9	48.2	2.7	7.5	5.3	55	48	7	45	36	9
1963.....	17.1	9.4	7.7	52.6	2.8	10.8	9.2	55	41	14	45	34	11
1964.....	18.9	10.6	8.3	57.2	2.9	10.5	8.8	56	37	19	44	34	9
1965.....	20.0	10.8	9.2	59.4	2.8	6.3	3.8	54	33	1	46	35	11
1966.....	21.8	11.4	10.5	62.6	2.8	9.0	5.5	52	33	19	48	36	12
1967.....	23.1	11.3	11.8	64.4	2.8	6.0	2.9	49	35	14	51	38	13
1968.....	24.6	11.8	12.8	65.5	2.8	6.3	1.6	48	35	13	52	39	13
1969.....	25.6	11.5	14.1	64.7	2.7	4.2	-1.2	45	34	11	55	42	13
1970.....	26.1	11.2	14.9	62.4	2.6	2.0	-3.5	43	33	10	57	43	14
1971.....	26.7	10.9	15.7	60.4	2.4	2.1	-3.2	41	32	9	59	44	15
1972.....	28.5	11.7	16.8	61.4	2.4	6.8	1.7	41	32	9	59	44	15
1973.....	30.7	11.7	19.0	62.4	2.3	7.8	1.6	38	30	8	62	47	15
1974.....	32.9	11.5	21.4	61.5	2.2	7.0	-1.5	35	27	8	65	49	16
1975.....	35.2	12.0	23.2	59.9	2.2	7.1	-2.6	34	26	8	66	49	17
1976.....	39.0	13.3	25.7	62.1	2.2	10.8	3.8	34	26	8	68	49	17
1977.....	42.8	14.1	28.7	63.7	2.2	9.8	2.4	33	26	7	67	50	17
1978.....	48.1	14.9	33.2	66.8	2.1	12.5	4.9	31	25	6	69	50	19
1979.....	54.9	15.9	39.0	70.1	2.2	14.1	5.0	29	23	6	70	51	19
1980.....	62.6	17.5	45.1	73.2	2.3	13.9	4.5	28	22	6	72	53	19
1981.....	71.9	20.9	51.0	76.6	2.4	14.8	3.9	29	24	5	71	54	17
1982.....	79.4	23.8	55.6	78.4	2.5	10.4	3.6	30	26	4	70	54	16
1983.....	87.3	27.9	59.4	84.0	2.6	10.0	5.8	32	28	4	68	53	15
1984.....	97.8	32.3	85.5	80.7	2.6	12.0	8.0	33	30	3	67	54	13
1985.....	107.8	37.7	70.1	97.0	2.7	10.2	7.0	35	32	3	64	52	13
1986.....	112.5	40.5	72.0	98.6	2.7	4.4	1.6	36	33	3	64	52	12
1987, est.....	117.9	43.6	74.3	100.1	2.6	4.8	1.5	37	34	3	64	52	12

¹ Based on GNP implicit price deflator. ² GNP=Gross national product. ³ Change from prior year shown; 1955 change from 1954.

Source: U.S. National Science Foundation, *National Patterns of Science and Technology Resources*, annual, and unpublished data.

No. 971. RESEARCH AND DEVELOPMENT (R&D)—SOURCE OF FUNDS AND PERFORMANCE SECTOR: 1960 TO 1987

[In millions of dollars. See headnote, table 972]

YEAR	Total	SOURCE OF FUNDS				PERFORMANCE SECTOR				
		Fed- eral Govt.	Indus- try	Univ., col- leges	Other ¹	Fed- eral Govt.	Indus- try	Univ., col- leges	Associa- ted FFRDO's ¹	Other ²
Current dollars:										
1960.....	13,523	8,738	4,516	149	120	1,726	10,509	646	360	282
1970.....	26,134	14,892	10,444	461	337	4,079	18,087	2,335	737	916
1975.....	35,213	18,109	15,820	749	535	5,354	24,187	3,409	987	1,276
1980.....	62,594	29,453	30,914	1,326	901	7,632	44,505	6,081	2,246	2,150
1981.....	71,866	33,404	35,946	1,555	981	8,425	51,810	6,846	2,486	2,300
1982.....	79,364	36,512	40,101	1,735	1,016	9,141	57,995	3,242	2,479	2,425
1983.....	87,280	40,691	43,524	1,938	1,128	10,582	63,403	7,883	2,737	2,675
1984.....	97,793	45,377	49,107	2,107	1,202	11,572	71,470	8,823	3,118	3,010
1985.....	107,757	51,868	52,358	2,377	1,354	12,945	78,269	9,894	3,529	3,320
1986.....	112,495	54,330	53,948	2,789	1,427	13,535	80,629	10,926	3,900	3,505
1987, est.....	117,892	56,391	56,722	3,145	1,624	13,413	84,600	12,082	4,202	3,565
Constant (1982) dollars: ³										
1960.....	43,648	28,191	14,591	479	387	5,548	33,955	2,077	1,157	911
1970.....	62,405	35,630	24,851	1,111	807	9,834	42,986	5,829	1,777	2,179
1975.....	59,883	30,868	26,679	1,302	916	8,908	40,781	5,927	1,718	2,151
1980.....	73,237	34,548	38,067	1,585	1,057	9,008	51,919	7,152	2,650	2,508
1981.....	76,638	35,684	38,259	1,868	1,027	9,039	55,140	7,344	2,687	2,448
1982.....	79,364	36,512	40,101	1,735	1,016	9,141	57,995	7,324	2,479	2,425
1983.....	83,964	39,116	41,905	1,857	1,085	10,153	61,047	7,583	2,626	2,576
1984.....	90,684	42,042	45,582	1,947	1,113	10,686	65,342	7,970	2,682	2,794
1985.....	96,999	46,483	47,188	2,131	1,217	11,807	70,544	8,692	3,164	2,982
1986.....	98,599	47,567	47,349	2,434	1,249	11,813	70,771	9,538	3,404	3,078
1987, est.....	100,059	47,821	48,201	2,680	1,377	11,344	71,886	10,218	3,554	3,047

¹ University associated federally-funded R&D centers. ² Nonprofit institutions. ³ Based on gross national product implicit price deflator.

Source: U.S. National Science Foundation, *National Patterns of Science and Technology Resources*, annual.

Research and Development Funds

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NO. 972. RESEARCH AND DEVELOPMENT (R&D) FUNDS, BY PERFORMANCE SECTOR AND SOURCE: 1970 TO 1987

[In millions of dollars, except percent. Data primarily on calendar year basis—calendar year data for industry and other nonprofit institutions combined with Federal and university fiscal year data. Data refer, in general, to natural sciences including engineering, and to social sciences in all but industry sector. Excludes capital expenditures data. Expenditures at associated federally funded research and development centers administered by industry and other nonprofit institutions included in totals of respective sectors. See also *Historical Statistics, Colonial Times to 1970*, series W 109-125]

PERFORMANCE SECTOR AND SOURCE OF FUNDS	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987, est.
Total R&D	26,134	35,213	62,594	71,866	79,384	97,280	97,793	107,757	112,495	117,862
In 1982 dollars ¹	62,405	59,883	73,237	78,638	79,384	93,984	90,884	96,999	98,599	100,059
Percent Federal as source	57.1	51.7	47.2	48.6	46.0	46.8	46.4	47.9	48.2	47.8
Percent of gross national product	2.6	2.2	2.4	2.4	2.5	2.6	2.8	2.7	2.7	2.6
Federal Government	4,079	5,354	7,832	8,425	9,141	10,582	11,572	12,945	13,535	13,413
Industry	18,087	24,187	44,505	51,810	57,998	63,403	71,470	79,269	80,623	84,600
Federal funds	7,778	8,805	14,029	18,382	18,483	20,542	23,182	26,830	27,782	29,100
Industry funds	10,288	15,582	30,476	35,426	39,512	42,861	46,308	51,439	52,847	55,500
Universities and colleges	2,335	3,409	6,081	8,445	8,724	7,883	8,623	9,694	10,928	12,082
Federal funds	1,648	2,288	4,098	4,561	4,759	4,980	5,425	6,064	6,713	7,326
Industry funds	61	113	238	293	339	388	474	559	692	777
University and college funds ³	461	749	1,326	1,555	1,735	1,936	2,107	2,377	2,789	3,145
Other nonprofit institutions funds ³	165	259	401	436	491	579	617	694	732	834
Universities and colleges, associated federally funded R&D centers	737	987	2,246	2,486	2,479	2,737	3,118	3,529	3,900	4,202
Other nonprofit institutions	916	1,276	2,150	2,300	2,425	2,875	3,010	3,320	3,505	3,585
Federal funds	649	875	1,450	1,550	1,650	1,850	2,100	2,300	2,400	2,350
Industry funds	95	125	200	225	250	275	325	360	410	445
Other ⁴	172	276	500	625	525	550	585	680	695	780
Total research, basic and applied	9,289	12,550	22,307	28,274	28,721	31,712	34,865	38,288	40,335	42,883
In 1982 dollars ²	22,199	21,495	26,172	28,089	28,721	30,485	32,118	34,431	35,313	36,383
Percent Federal as source	60.2	57.4	55.5	53.0	52.3	52.9	52.2	53.1	53.2	52.8
Federal Government	1,904	2,484	3,686	4,034	4,194	4,710	4,784	5,056	5,160	5,438
Industry	4,028	5,300	9,775	12,313	14,056	15,657	17,503	19,537	20,118	20,940
Federal funds	1,207	1,267	2,190	2,641	3,330	4,077	4,853	5,757	5,981	6,050
Industry funds	2,828	4,013	7,585	9,672	10,725	11,580	12,850	13,780	14,157	14,880
Universities and colleges	2,223	3,261	5,719	6,457	6,901	7,440	8,195	9,108	10,211	11,315
Federal funds	1,584	2,210	3,887	4,336	4,744	5,155	5,744	6,333	6,826	7,171
Industry funds	56	106	222	272	314	382	442	518	587	626
University and college funds ³	448	702	1,236	1,444	1,606	1,804	1,963	2,203	2,567	2,902
Other nonprofit institutions funds ³	155	243	374	405	455	539	575	643	674	770
Universities and colleges, associated federally funded R&D centers	485	652	1,662	1,865	1,891	2,085	2,303	2,502	2,711	2,910
Other nonprofit institutions	628	873	1,465	1,805	1,680	1,820	1,980	2,085	2,195	2,280
Federal funds	409	545	930	1,010	1,075	1,180	1,250	1,300	1,300	1,350
Industry funds	77	103	180	180	200	220	260	285	320	350
Other ⁴	142	225	395	415	405	420	450	500	515	580
Total basic research	3,549	4,738	8,415	9,591	10,410	11,583	12,708	13,933	15,311	16,505
In 1982 dollars ²	8,527	8,177	9,902	10,269	10,410	11,124	11,758	12,610	13,382	13,976
Percent of total R&D	13.7	13.7	13.5	13.4	13.1	13.2	13.0	12.9	13.8	14.0
Percent Federal as source	70.2	69.2	70.2	68.0	68.2	67.2	66.2	65.7	64.9	64.4
Federal Government	577	734	1,182	1,302	1,485	1,690	1,881	1,923	2,019	2,046
Industry	602	730	1,325	1,614	1,880	2,152	2,475	2,622	2,780	2,940
Federal funds	158	157	290	301	380	462	471	482	513	550
Industry funds	444	573	1,035	1,313	1,500	1,692	2,004	2,140	2,277	2,390
Universities and colleges	1,798	2,410	4,024	4,589	4,883	5,324	5,731	6,558	7,512	8,301
Federal funds	1,298	1,694	2,852	3,251	3,403	3,565	3,826	4,348	4,900	5,354
Industry funds	40	72	142	172	196	235	282	340	429	481
University and college funds ³	350	478	791	911	1,001	1,173	1,255	1,448	1,729	1,949
Other nonprofit institutions funds ³	110	166	239	255	283	351	368	422	454	517
Universities and colleges, associated federally funded R&D centers	289	439	1,124	1,261	1,317	1,472	1,609	1,712	1,820	1,963
Other nonprofit institutions	305	425	760	825	865	945	1,030	1,120	1,170	1,255
Federal funds	189	245	450	495	535	600	650	690	700	725
Industry funds	44	60	95	105	115	125	150	165	180	210
Other ⁴	72	120	215	225	215	220	230	265	280	320
Total development	16,885	22,663	40,287	45,592	50,643	55,568	63,128	69,469	72,160	74,999
In 1982 dollars ²	40,208	38,388	47,084	48,689	50,643	53,478	58,566	62,588	63,286	63,996
Percent of total R&D	64.4	64.1	64.3	63.4	63.8	63.7	64.8	64.5	64.2	63.7
Percent Federal as source	55.4	48.5	42.6	42.9	42.5	43.0	43.1	45.0	45.5	44.9

¹ Basic research, applied research, and development. ² Based on gross national product implicit price deflator. ³ Includes State and local government funds received by these institutions and used for research and development. ⁴ Includes estimates for independent nonprofit hospitals and voluntary health agencies.

Source: U.S. National Science Foundation, *National Patterns of Science and Technology Resources*, annual.

No. 973. NATIONAL RESEARCH AND DEVELOPMENT (R&D) EXPENDITURES AS A PERCENT OF GROSS NATIONAL PRODUCT, BY COUNTRY: 1972 TO 1987

YEAR	TOTAL R&D						NON DEFENSE R&D ¹					
	United States	France	West Germany	Japan	United Kingdom	Soviet Union ²	United States	France	West Germany	Japan	United Kingdom	
1972.....	2.3	1.9	2.2	1.9	2.1	3.7	1.6	1.5	2.1	1.9	1.5	
1975.....	2.2	1.8	2.2	2.0	2.1	3.8	1.6	1.5	2.1	2.0	1.5	
1979.....	2.2	1.8	2.4	2.1	(NA)	3.6	1.6	1.4	2.3	2.1	(NA)	
1980.....	2.3	1.8	2.4	2.2	(NA)	3.6	1.7	1.4	2.3	2.2	(NA)	
1981.....	2.4	2.0	2.5	2.3	2.4	3.8	1.8	1.5	2.4	2.3	1.7	
1982.....	2.5	2.1	2.6	2.4	(NA)	3.7	1.8	1.6	2.5	2.4	(NA)	
1983.....	2.6	2.1	2.6	2.6	2.2	3.8	1.8	1.7	2.5	2.5	1.6	
1984.....	2.6	2.2	2.6	2.6	(NA)	4.0	1.8	1.7	2.5	2.6	(NA)	
1985.....	2.7	2.3	2.8	2.8	2.3	3.7	1.8	1.6	2.6	2.8	1.6	
1986.....	2.7	2.3	2.7	2.8	2.4	3.8	1.8	1.8	2.6	2.8	1.8	
1987.....	2.6	2.3	2.8	(NA)	(NA)	(NA)	1.9	1.9	2.6	(NA)	(NA)	

NA Not available. ¹ Estimated.

Source: U.S. National Science Foundation, *Science Indicators*, biennial; *National Patterns of Science and Technology Resources*, annual; and *International Science and Technology Data Update*, annual.

No. 974. FEDERAL FUNDING FOR RESEARCH AND DEVELOPMENT, BY BUDGET FUNCTION: 1975 TO 1989

[In millions of dollars. For fiscal years ending in year shown; see text, section 9. Excludes R&D plant. Data for 1975 are shown in obligations; thereafter, are shown in budget authority. See *Historical Statistics, Colonial Times to 1970*, series W 126, for total obligations]

FUNCTION	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988, est.	1989, est.
Total ¹	19,039	29,739	33,795	36,115	38,780	44,214	49,887	53,249	57,069	59,204	62,892
National defense.....	9,679	14,946	18,413	22,070	24,936	29,287	33,598	36,926	39,152	40,300	41,318
Health.....	2,170	3,694	3,871	3,868	4,298	4,779	5,418	5,565	6,556	7,087	7,849
Space research and technology.....	2,764	2,738	3,111	2,584	2,134	2,725	2,694	3,399	3,574	4,733	5,253
General science.....	813	1,233	1,340	1,359	1,502	1,876	1,862	1,873	2,042	2,150	2,126
Energy.....	1,863	3,603	3,501	3,012	2,578	2,581	2,389	2,286	2,063	2,126	2,471
Transportation.....	635	887	859	791	876	1,040	1,030	917	908	918	1,064
Natural resources and environment.....	624	899	1,061	985	952	963	1,059	1,062	1,133	1,163	1,061
Agriculture.....	342	585	659	693	745	762	836	815	822	876	850
Education, training, employment ²	239	468	298	228	189	200	220	220	248	267	290
International affairs.....	29	125	160	165	177	192	210	211	223	228	199
Veterans benefits and services.....	95	126	143	139	157	218	183	183	215	210	206
Commerce and housing credit.....	65	101	106	104	107	110	114	111	110	121	131
Administration of justice.....	44	45	34	31	37	24	47	41	49	43	55
Community and regional develop.....	93	119	104	63	44	46	50	68	99	102	93

¹ Includes functions not shown separately. ² Includes social services.

Source: U.S. National Science Foundation, *Federal R&D Funding by Budget Function*, annual.

No. 975. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY AGENCY: 1975 TO 1988

[In millions of dollars, except percent. For fiscal years ending in year shown; see text, section 9. See *Historical Statistics, Colonial Times to 1970*, series W 142, for total R&D expenditures. Minus sign (–) indicates decline]

AGENCY	1975	1980	1982	1983	1984	1985	1986	1987, est.	1988, est.	PERCENT CHANGE	
										1986- 87	1987- 88
Obligations, total.....	19,039	29,830	36,433	38,712	42,225	48,380	51,412	56,492	63,397	9.9	12.2
Dept. of Defense.....	9,013	13,981	20,823	22,993	25,373	29,792	32,938	36,244	42,663	10.0	17.7
National Aeronautics and Space Administration.....	3,064	3,234	3,078	2,662	2,822	3,327	3,420	4,185	4,498	22.4	7.5
Dept. of Commerce.....	215	343	336	335	358	399	399	408	328	2.3	-19.6
Dept. of Energy.....	2,047	4,754	4,708	4,537	4,674	4,966	4,688	4,851	4,992	3.5	2.7
Dept. of Health and Human Services.....	2,281	3,780	3,941	4,353	4,831	5,451	5,858	6,343	6,283	12.1	-9
National Science Foundation.....	595	882	975	1,062	1,203	1,346	1,353	1,463	1,706	8.1	16.6
Dept. of Agriculture.....	420	688	797	848	866	943	929	979	963	5.4	-1.6
Dept. of Transportation.....	312	361	310	348	448	429	386	310	290	-19.7	-6.5
Dept. of the Interior.....	303	411	381	383	411	392	385	405	371	5.2	-8.4
Environmental Protection Agency.....	258	345	335	241	261	320	317	329	346	3.8	5.2
Nuclear Regulatory Commission.....	64	183	220	207	191	150	124	112	120	-9.7	7.1
Veterans Administration.....	95	133	137	161	190	227	186	210	212	12.9	1.0
Agency for International Development.....	27	149	200	227	237	220	251	224	215	-10.8	-4.0
Dept. of Education.....	116	139	128	112	116	125	121	138	128	14.0	-7.2
Other agencies.....	229	447	263	245	244	274	257	293	293	14.0	-

- Represents or rounds to zero.

Source: U.S. National Science Foundation, *Federal Funds for Research and Development*, annual.

Companies Performing R&D—Federal Obligations for R&D

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NO. 976. COMPANIES PERFORMING RESEARCH AND DEVELOPMENT (R&D)—SELECTED DATA, BY INDUSTRY GROUP: 1975 TO 1986

SIC ¹ code	INDUSTRY GROUP	R&D FUNDS (mill. dol.)				R&D FUNDS AS PERCENT OF NET SALES				COMPANY R&D FUNDS, AS A PERCENT OF NET SALES				
		1975	1980	1985	1986	1975	1980	1985	1986	1975	1980	1985	1986	
	Total ²	24,187	44,505	78,268	80,629	3.1	3.0	4.4	4.7	2.0	2.1	2.9	3.2	
372, 376	Aircraft and missiles	5,713	9,198	17,918	16,240	12.7	13.7	16.9	15.7	2.8	3.8	3.9	4.0	
36	Electrical equipment	5,105	9,175	17,055	18,030	6.5	6.6	8.6	9.1	3.6	3.9	5.0	5.3	
35	Machinery	3,196	5,901	10,853	10,695	4.8	5.0	6.9	7.4	4.0	4.5	6.0	6.4	
28	Chemicals and allied products	2,727	4,636	8,690	9,021	3.7	3.6	4.9	5.1	3.1	3.3	4.7	4.9	
371	Motor vehicles	2,340	4,955	(D)	(D)	3.5	4.9	(D)	(D)	3.0	4.2	3.3	3.6	
38	Professional and scientific instruments	1,173	3,029	5,303	5,421	(D)	5.9	7.5	10.3	10.5	5.1	6.1	8.8	8.8
29	Petroleum refining	693	1,552			(D)	.7	.6	(D)	(D)	.5	.5		

D Withheld to avoid disclosure.

¹ Standard Industrial Classification.

² Includes industries not available.

Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

NO. 977. FEDERAL OBLIGATIONS FOR RESEARCH, BY FIELD OF SCIENCE: 1975 TO 1988

[In millions of dollars. For fiscal years ending in year shown; see text, section 9. See headnote, table 974. N.e.c.=Not elsewhere classified]

FIELD	1975	1980	1981	1982	1983	1984	1985	1986, est.	1987, est.	1988, est.
Research, total	6,730	11,597	12,213	13,022	14,254	14,979	15,133	16,502	17,812	18,005
Basic	2,588	4,674	5,041	5,482	6,280	7,067	7,819	8,153	8,821	9,134
Applied	4,141	6,923	7,172	7,541	7,983	7,911	8,315	8,349	8,891	8,871
Life sciences	2,455	4,192	4,436	4,745	5,178	5,636	6,362	6,464	7,078	7,092
Biological (excluding environmental)	(NA)	1,831	1,997	2,079	2,306	2,563	2,886	2,993	3,310	3,347
Environmental biology	(NA)	230	220	184	194	250	260	264	280	290
Agricultural	(NA)	447	495	549	565	512	609	604	600	581
Medical	951	1,537	1,610	1,773	1,927	2,113	2,368	2,360	2,613	2,592
Life sciences, n.e.c. ¹	52	148	114	161	186	198	239	243	275	282
Psychology	139	199	209	218	241	267	327	334	365	374
Biological aspects	37	60	58	60	63	81	91	90	112	108
Social aspects	57	95	93	98	105	108	143	144	140	156
Psychological sciences, n.e.c. ¹	45	44	58	61	73	78	93	100	113	111
Physical sciences	1,097	2,001	2,221	2,500	2,891	2,969	3,046	3,069	3,270	3,344
Astronomy	168	286	281	276	357	382	415	468	546	530
Chemistry	286	455	487	481	520	606	650	682	696	692
Physics	595	1,183	1,346	1,611	1,855	1,836	1,816	1,806	1,887	1,988
Physical sciences, n.e.c. ¹	48	78	107	133	159	144	165	133	142	136
Environmental sciences	727	1,261	1,121	1,148	1,251	1,276	1,404	1,482	1,553	1,626
Atmospheric	302	410	373	426	461	434	486	521	546	568
Geological	192	402	398	358	334	359	429	444	447	520
Oceanography	144	262	262	281	344	363	398	430	465	414
Environmental sciences, n.e.c. ¹	90	168	80	104	113	119	90	87	95	105
Mathematics and computer sciences	125	241	279	350	419	440	575	615	654	688
Mathematics	(NA)	91	118	128	134	151	184	185	220	222
Computer sciences	(NA)	129	122	171	215	215	280	302	281	298
Mathematics and computer sciences, n.e.c. ¹	(NA)	21	40	51	71	75	111	128	154	168
Engineering	1,718	2,830	3,071	3,387	3,517	3,624	3,618	3,739	3,979	3,976
Aeronautical	345	709	710	741	821	860	738	776	813	882
Astronautical	99	302	304	291	321	397	425	527	687	700
Chemical	84	96	148	95	145	144	254	246	249	201
Civil	126	159	159	202	188	203	217	203	193	227
Electrical	287	517	557	612	615	630	627	674	729	687
Mechanical	162	208	205	201	266	190	267	237	227	255
Metallurgy and materials	222	236	256	309	333	341	439	445	450	460
Engineering, n.e.c. ¹	393	603	734	935	828	858	651	632	630	565
Social sciences	302	524	497	386	435	436	460	416	484	473
Anthropology	14	17	15	15	13	19	18	14	15	15
Economics	126	193	207	157	166	147	180	131	138	146
Political science	12	12	11	8	11	11	15	12	11	13
Sociology	55	71	65	52	68	70	66	67	83	74
Social sciences, n.e.c. ¹	95	230	200	155	178	189	201	192	236	225
Other sciences, n.e.c. ¹	167	350	379	287	320	331	342	383	428	431

NA Not available. ¹ N.e.c.=Not elsewhere classified.

Source: U.S. National Science Foundation, *Federal Funds for Research and Development*, annual.

Science

NO. 978. FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES: 1970 TO 1986

[In millions of dollars, except percent. For fiscal years ending in year shown; see text, section 9. Total and nonscience/engineering activities for 1981-1983 are estimates based on revised student aid data from the Dept. of Education. Mirus sign (-) indicates decrease]

ITEM	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986
Federal obligations, total	3,237	4,547	7,472	7,604	8,298	8,640	8,776	9,341	10,118	10,960	11,584
Annual percent change ¹	-6.5	1.5	15.1	1.8	9.1	4.1	1.6	6.4	8.3	8.3	5.7
Academic science/engineering obligations	2,188	2,806	3,960	4,473	4,790	5,082	5,179	5,680	6,390	7,249	7,399
Percent of total	67.6	61.7	53.0	58.8	57.7	58.6	59.0	60.8	63.2	66.1	63.8
Research and development	1,447	2,246	3,386	3,874	4,160	4,410	4,554	5,024	5,634	6,368	6,538
Research and development plant	45	45	34	32	38	28	31	38	50	114	106
Other science/engineering activities	608	515	540	567	593	624	594	619	706	767	755
Nonscience/engineering activities	1,049	1,741	3,512	3,131	3,508	3,578	3,597	3,861	3,728	3,710	4,185

¹ Percent change from prior year.

Source: U.S. National Science Foundation, *Survey of Federal Support to Universities, Colleges, and Selected Nonprofit Institutions*, annual.

NO. 979. FEDERAL R&D OBLIGATIONS TO SELECTED UNIVERSITIES AND COLLEGES: 1975 TO 1986

[In thousands of dollars. For fiscal years ending in year shown; see text, section 9. For the top 50 institutions receiving Federal R&D funds in 1986. Awards to the administrative offices of university systems are excluded from totals for individual institutions because that allocation of funds is unknown, but those awards are included in "total all institutions"]

MAJOR INSTITUTION RANKED BY TOTAL 1986 FEDERAL R&D OBLIGATIONS	1975	1980	1985	1986
Total of all institutions ¹	2,246,088	4,159,857	6,368,608	6,538,280
50 institutions, percent of total	63.7	64.5	66.0	65.6
Johns Hopkins University ²	41,261	240,096	429,180	445,718
Massachusetts Institute of Technology ³	68,715	142,094	189,558	188,120
Stanford University ³	58,665	104,610	174,961	180,186
University of Washington	60,235	100,577	146,179	146,718
University of California-San Diego	48,550	91,427	109,633	133,243
Columbia University	48,565	81,511	127,331	127,131
University of California-Los Angeles	54,203	87,284	128,211	125,483
University of Wisconsin-Madison	49,558	80,828	124,604	120,626
Cornell University ³	39,801	75,166	119,966	112,707
Yale University	36,672	68,937	109,227	111,687
University of Michigan	38,403	71,935	108,035	111,232
Harvard University	48,836	84,554	109,414	110,356
University of California-San Francisco	33,689	62,771	98,536	104,453
University of Pennsylvania	43,538	71,084	103,119	103,487
University of Minnesota	39,695	76,068	103,272	100,898
University of California-Berkeley ³	40,797	50,426	106,710	96,834
University of Illinois-Urbana	34,100	50,800	83,122	88,986
Pennsylvania State University ⁴	20,266	48,463	76,726	97,041
University of Southern California	28,678	49,343	89,706	77,533
University of Texas-Austin	23,307	40,434	72,379	74,028
University of Colorado	22,338	44,823	71,424	73,630
Washington University	30,719	52,529	71,978	72,750
University of Chicago ³	39,300	50,592	71,194	71,535
University of Rochester	25,408	41,324	70,379	71,521
University of North Carolina-Chapel Hill	19,187	35,795	63,105	70,526
Duke University	24,550	42,685	69,169	70,034
New York University	28,029	39,494	74,577	68,372
Carnegie-Mellon University ³	10,014	22,081	48,872	59,854
California Institute of Technology ³	21,002	35,552	55,083	59,707
University of Pittsburgh	18,586	33,246	58,620	59,373
Yeshiva University	24,782	40,275	58,908	58,518
Ohio State University	20,913	37,312	56,065	58,078
University of Utah	19,736	31,966	50,938	55,290
University of Maryland-College Park	13,772	26,463	51,073	53,908
University of Iowa	16,645	34,677	55,117	52,226
University of Arizona	16,138	33,887	49,740	51,123
Case Western Reserve University	18,975	31,420	47,994	49,331
University of Florida	16,257	25,487	47,716	48,911
Michigan State University	18,003	28,835	46,985	48,740
Boston University	13,325	24,943	46,152	48,518
Purdue University	21,460	36,724	51,544	48,827
Georgia Institute of Technology	9,455	27,888	51,685	46,557
University of Alabama-Birmingham	15,507	26,995	44,093	45,856
Vanderbilt University	13,770	25,978	39,909	43,990
Baylor College of Medicine	18,615	31,784	45,837	43,801
University of California-Davis	19,837	42,245	43,156	43,618
Northwestern University	18,721	31,982	46,260	43,608
Princeton University ³	16,038	21,492	34,720	42,674
Indiana University	13,132	26,770	39,118	41,878
University of Texas—Health Science Center, Dallas	10,662	22,172	37,432	40,330

¹ Includes other institutions, not shown separately. ² Data for Johns Hopkins University includes obligations to the applied physics laboratory, considered a federally funded research and development center (FFRDC) until fiscal year 1978. ³ Does not include R&D obligations to university administered FFRDC's. ⁴ Data for Pennsylvania State University includes obligations to the applied research laboratory, considered an FFRDC until fiscal year 1978.

Source: U.S. National Science Foundation, *Federal Support to Universities and Colleges and Selected Non-Profit Institutions*, annual.

Research and Development—Scientists and Engineers

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No. 980. RESEARCH AND DEVELOPMENT (R&D) EXPENDITURES IN SCIENCE AND ENGINEERING AT UNIVERSITIES AND COLLEGES: 1980 TO 1986

[In millions of dollars. Estimates for nonrespondents account for less than 8 percent of the total]

CHARACTERISTIC	1980	1983	1984	1985	1986	CHARACTERISTIC	1980	1983	1984	1985	1986
Total.....	6,061	7,798	8,508	9,524	10,718	Fields—Con.					
in 1982 dollars ¹	7,152	7,482	7,864	8,527	9,332	Environmental sciences—Con.					
Basic research.....	4,027	5,265	5,638	6,387	7,244	Oceanography.....	172	224	238	260	276
Applied R&D.....	2,034	2,533	2,870	3,138	3,475	Other environmental.....	62	81	83	85	112
Source of funds:						Mathematical sciences	79	108	124	130	152
All governments.....	4,588	5,577	6,069	6,727	7,536	Computer sciences.....	114	175	222	279	315
Institutions' own funds.....	827	1,256	1,350	1,557	1,774	Life sciences	3,218	4,233	4,617	5,155	5,746
Industry.....	237	378	461	543	667	Agricultural sciences	680	896	930	1,029	1,122
Other.....	408	587	629	698	740	Biological sciences	1,030	1,408	1,555	1,698	1,833
Fields:						Medical sciences	1,414	1,802	1,990	2,260	2,578
Physical sciences.....	677	897	992	1,134	1,261	Other life sciences	93	128	142	170	213
Astronomy.....	59	74	80	91	96	Psychology	111	139	147	162	180
Chemistry.....	244	335	368	412	460	Social sciences	341	354	372	390	459
Physics.....	322	414	469	550	622	Economics	90	96	109	116	132
Other physical sciences.....	52	74	74	81	83	Political sciences	55	56	56	61	69
Environmental sciences..	509	619	650	705	774	Sociology	89	78	75	79	88
Atmospheric.....	67	98	103	110	125	Other social sciences..	107	124	132	135	171
Earth sciences	188	216	226	251	262	Other sciences	146	162	176	182	220
						Engineering.....	865	1,111	1,207	1,387	1,609

¹ Based on the Gross national product implicit price deflator; see text, section 14.

Source: U.S. National Science Foundation, *Survey of Scientific and Engineering Expenditures at Universities and Colleges*, annual.

No. 981. SCIENTISTS AND ENGINEERS EMPLOYED IN RESEARCH AND DEVELOPMENT: 1970 TO 1987

[In thousands of full-time equivalent employees. Yearly averages for industry sector only. Excludes those employed by State and local government agencies, except as noted. DOD=Dept. of Defense. FFRDC's=federally funded R&D centers]

SECTOR	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987 ¹
Total	543.8	527.4	651.2	683.3	702.5	722.5	745.9	772.7	791.1	801.4
Industry (excl. social scientists) ²	375.6	363.9	469.2	498.8	516.0	533.3	552.4	571.7	583.8	590.0
Universities and colleges, total ²	79.5	82.1	95.9	98.3	99.5	100.4	103.4	108.6	113.5	119.1
Scientists and engineers.....	61.3	63.5	72.7	73.9	74.5	75.5	77.3	81.1	84.7	87.9
Graduate students	18.2	18.6	23.2	24.4	25.0	24.8	26.1	27.5	28.8	31.2
Federal Government (incl. DOD).....	67.5	58.4	58.6	59.2	60.0	61.3	62.1	62.9	63.3	62.3
Other nonprofit institutions ^{2,3}	21.2	23.0	27.5	27.0	27.0	27.5	28.0	29.5	30.5	30.0

¹ Estimated. ² Includes professional R&D personnel employed at FFRDC's administered by industry and other nonprofit institutions. ³ Includes estimate for R&D scientists and engineers employed in State-affiliated institutions.

Source: U.S. National Science Foundation, *National Patterns of Science and Technology Resources*, annual.

No. 982. RESEARCH AND DEVELOPMENT SCIENTISTS AND ENGINEERS—AVERAGE FULL-TIME-EQUIVALENT EMPLOYMENT AND COST, BY INDUSTRY: 1970 TO 1986

[Data are estimates; on average full-time-equivalent (FTE) basis. See *Historical Statistics, Colonial Times to 1970*, series W 167, for total cost per scientist or engineer]

SIC ¹ code	INDUSTRY	1970	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
(x)	Average FTE of scientists and engineers (1,000)^{2,3}	375.6	363.9	393.6	414.2	437.3	469.2	498.8	516.0	533.3	552.4	570.3	583.7
28	Chemicals ⁴	41.4	44.8	47.4	49.2	50.7	53.1	58.2	63.8	66.6	67.1	68.5	68.1
35	Machinery.....	42.5	54.3	56.8	59.0	61.2	65.7	72.6	78.2	75.7	76.2	79.6	79.9
36	Electrical equipment ⁵	96.2	81.5	84.3	84.7	89.8	100.7	108.4	110.1	113.2	115.7	117.4	124.5
371	Motor vehicles ⁶	(NA)	25.7	30.1	33.6	36.7	36.7	32.6	28.5	28.8	28.7	31.3	42.3
372,376	Aircraft and missiles.....	85.2	67.2	77.0	84.3	86.2	90.6	93.2	96.0	100.2	105.5	100.3	
(x)	Cost per scientist or engineer (\$1,000)^{7,3}	48.1	66.5	75.8	80.4	87.4	94.9	103.9	112.4	118.9	129.8	137.0	138.1
28	Chemicals ⁴	42.8	60.9	67.6	72.8	79.6	87.4	96.6	104.4	108.6	119.2	126.9	132.5
35	Machinery.....	40.7	58.9	68.6	72.6	78.9	89.9	93.9	102.9	110.9	126.4	136.5	133.9
36	Electrical equipment ⁵	43.9	62.7	69.9	76.8	87.2	91.1	95.3	105.8	123.2	134.9	145.3	144.9
371	Motor vehicles ⁶	(NA)	91.1	111.7	115.6	122.9	135.2	147.4	162.9	185.3	211.6	(b)	(b)
372,376	Aircraft and missiles.....	61.3	85.1	91.3	89.4	93.3	101.6	128.4	146.4	144.3	158.5	169.8	162.0

D Withheld to avoid disclosure. NA Not available. X Not applicable. ¹ Standard Industrial Classification; see text, section 13. ² The mean number of FTE R&D scientists and engineers employed in January of the year shown and the following January. ³ Includes industries not shown separately. ⁴ Includes allied products. ⁵ Includes communication. ⁶ Includes other transportation equipment. ⁷ Represents the arithmetic mean of the numbers of R&D scientists and engineers reported in each industry for January in two consecutive years divided into total R&D expenditures in each industry.

Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

NO. 983. SCIENTISTS AND ENGINEERS, BY LABOR FORCE STATUS, SEX, AND FIELD: 1980 AND 1986

[In thousands, except percent. Represents the total science and engineering population in the United States]

FIELD	1980				1986			
	Total		In labor force ¹		Total		In labor force ¹	
	Number	Percent female	Total	Employed	Number	Percent female	Total	Employed
Total, all fields	3,083	11.5	2,917	2,860	4,972	15.4	4,699	4,627
Engineers, total	1,800	3.0	1,701	1,676	2,635	4.1	2,471	2,440
Aeronautical/astronautical	76	2.1	71	70	117	3.8	111	111
Chemical	103	4.8	97	95	172	7.6	153	149
Civil	250	2.6	236	222	381	3.7	352	346
Electrical/electronics	404	2.0	395	383	621	3.4	581	575
Mechanical	349	2.0	327	323	548	2.8	499	493
Other engineers	619	4.1	584	574	796	5.1	775	766
Scientists, total	1,283	23.4	1,216	1,185	2,337	28.1	2,228	2,186
Life scientists	313	19.2	295	288	452	26.1	421	412
Computer specialists	215	28.7	210	208	576	29.7	567	563
Physical scientists	235	10.3	220	215	313	13.9	293	288
Social scientists	229	29.5	214	204	459	31.7	438	428
Economists	84	15.9	78	75	177	19.2	169	164
Other social scientists	145	37.3	136	129	282	39.5	270	264
Psychologists	137	39.4	132	128	274	45.5	280	254
Environmental scientists	84	14.2	79	78	123	12.3	116	111
Mathematical scientists	70	29.6	66	64	140	26.9	133	131

¹ Includes scientists and engineers who are employed and those unemployed but actively seeking employment.Source: National Science Foundation, *U.S. Scientists and Engineers: 1986*, and unpublished data.

NO. 984. CHARACTERISTICS OF EMPLOYED SCIENTISTS AND ENGINEERS: 1986

[Percent distribution, except as indicated. Represents total science and engineering employment in the United States]

CHARACTERISTIC	Total	Engi- neers	Life sci- entists	Compu- ter special- ists	Physi- cal sci- entists	SOCIAL SCIENTISTS			Psy- chol- ogists	Environ- mental sci- entists	Mathe- matical sci- entists
						Total	Econo- mists	Other social sci- entists			
Total (1,000)	4,627	2,440	412	563	288	428	164	264	254	111	131
Male	84.9	95.9	75.0	71.1	86.4	68.7	80.5	61.4	54.6	88.4	74.1
Female	15.1	4.1	25.0	28.9	13.6	31.3	19.5	38.6	45.4	11.6	25.9
Highest degree:											
Doctorate	13.3	4.3	29.5	3.4	39.6	23.0	21.8	23.7	38.5	18.4	30.7
Master's	23.6	23.0	21.4	25.2	20.3	22.1	21.7	22.3	26.6	31.1	33.7
Bachelor's	55.1	59.9	44.6	69.9	38.0	51.7	53.0	50.9	32.4	48.2	34.1
Other	8.0	12.8	4.5	1.5	2.1	3.2	3.5	3.0	2.6	2.2	1.6
Type of employer:											
Industry	67.8	79.5	37.2	78.2	58.8	50.4	62.5	42.9	40.2	58.5	41.8
Educational institutions	13.6	4.1	35.9	6.7	24.7	26.4	20.5	30.1	31.3	16.4	44.8
Nonprofit organizations	3.6	1.5	7.0	2.5	3.3	6.4	2.2	8.9	17.9	1.2	2.1
Federal Government	7.7	7.6	10.3	6.8	10.3	5.1	7.8	3.4	2.7	15.6	8.5
Military	.6	.8	.4	.5	.3	.3	.1	.4	.3	1.3	.4
State, local, and other government	5.0	4.9	7.7	3.7	2.9	9.9	5.3	12.7	5.8	5.3	1.7
Other	1.6	1.7	1.5	1.6	1.7	1.5	1.6	1.5	1.8	1.5	.8

Source: U.S. National Science Foundation, *U.S. Scientists and Engineers: 1986*.

NO. 985. PROFESSIONAL SCIENTIFIC, ENGINEERING, AND TECHNICAL PERSONNEL IN THE FEDERAL GOVERNMENT, BY OCCUPATIONAL GROUP: 1970 TO 1986

[In thousands, except percent. As of October. Excludes health professional personnel]

OCCUPATIONAL GROUP	1970	1975	1980	1983 ^{1,2}	1985 ^{2,3}	1986 ^{2,3}	PERCENT FEMALE					
							1970	1975	1980	1983 ^{1,2}	1985 ^{2,3}	1986 ^{2,3}
Total	180.3	188.9	206.9	218.9	238.0	239.2	6.7	6.5	9.5	11.8	13.8	14.6
Scientific personnel	77.2	77.3	88.0	89.5	91.4	89.5	8.0	8.8	12.7	14.1	15.6	16.3
Physical sciences	29.8	27.1	27.6	27.1	27.6	27.3	6.4	6.6	9.5	10.9	12.5	13.1
Mathematics ⁴	8.6	10.0	11.1	10.7	11.0	10.6	17.4	15.9	19.8	20.9	22.8	23.3
Life sciences	26.9	26.4	30.5	33.5	33.5	32.5	4.1	5.1	8.7	11.3	12.1	13.0
Social sciences ⁵	6.6	8.0	10.5	9.3	10.1	10.1	16.2	17.6	23.3	22.8	25.1	25.7
Economics	4.3	5.0	5.9	5.3	5.9	5.8	11.1	12.9	17.4	18.4	20.6	21.1
Other	2.3	3.0	4.6	4.0	4.2	4.3	25.1	23.7	30.8	28.7	31.5	31.9
Geography ⁶	3.3	2.9	4.9	5.5	5.7	5.6	8.5	7.9	14.8	16.6	17.0	16.9
Psychology	2.2	2.9	3.3	3.3	3.4	3.4	13.7	14.6	16.8	18.8	21.4	22.4
Engineering personnel	83.0	86.6	89.6	94.3	105.1	106.2	.5	.7	1.9	3.6	5.3	5.8
Computer specialists	20.1	25.0	29.3	35.2	41.5	43.5	21.1	19.1	23.3	27.9	31.4	32.8

¹ Excludes Tennessee Valley Authority (TVA). ² Excludes Post Office. ³ Data for 1985 and 1986 include personnel at TVA.⁴ Includes statistics.⁵ Includes community planning.⁶ Includes cartography.

Source: U.S. National Science Foundation. Compiled from data supplied by the U.S. Office of Personnel Management.

No. 986. CIVILIAN EMPLOYMENT OF SCIENTISTS, ENGINEERS, AND TECHNICIANS, BY OCCUPATION AND MAJOR INDUSTRIAL SECTOR: 1986

[In thousands. Based on sample and subject to sampling error. For details, see source]

OCCUPATION	WAGE AND SALARY WORKERS									Self-employed
	Total ¹	Mining ²	Construction	Manufacturing	Transportation ³	Trade	FIRE ⁴	Services	Government	
Scientists and engineers	2,138.1	53.5	41.1	829.2	103.1	57.0	77.0	586.9	380.9	131.0
Scientists	806.4	25.5	1.4	141.2	24.1	31.2	66.3	301.3	207.0	92.0
Physical scientists	169.4	20.3	.1	56.9	2.2	2.1	.6	48.7	38.3	11.0
Life scientists	133.2	.3	(z)	16.7	.8	1.8	.2	53.0	52.8	7.0
Mathematical scientists	47.6	.1	(z)	6.6	1.7	(z)	14.5	14.6	9.9	(z)
Social scientists	144.7	.3	.1	(z)	1.5	(z)	.9.6	82.8	50.3	54.0
Systems analysts, EDP	311.4	4.5	1.2	61.0	17.9	27.3	41.4	102.2	55.7	20.0
Engineers ⁵	1,331.7	28.0	39.7	688.0	79.0	25.8	10.7	285.6	173.9	39.0
Civil engineers	193.2	1.7	19.4	10.4	8.0	.4	.5	77.8	74.8	6.0
Electrical/electronics engineers	391.5	1.0	6.3	221.0	38.9	13.4	.9	77.4	32.7	9.0
Mechanical engineers	228.7	2.2	8.6	140.5	6.4	6.2	.6	51.0	13.1	4.0
Engineering technicians	1,241.1	19.0	31.4	484.6	77.1	79.9	6.9	372.4	162.4	23.0
Electrical/electronics technicians	309.4	1.0	4.7	135.2	29.4	60.3	1.2	51.3	26.2	4.0
Engineering technicians	373.5	4.8	5.0	134.8	26.4	9.4	.8	98.7	94.9	2.0
Drafters	333.2	4.6	21.5	125.6	19.0	7.2	2.6	137.4	13.2	15.0
Science technicians	225.0	8.5	.2	89.0	2.4	3.0	2.4	87.0	28.0	2.0
Surveyors	86.5	3.7	3.8	.1	3.4	(z)	.4	52.0	22.5	8.0
Computer programmers	463.6	3.3	2.2	92.0	24.2	44.2	68.3	192.9	36.1	15.0

² Fewer than 50. ¹ Includes agriculture, forestry, and fishing not shown separately.

³ Includes communications and public utilities. ⁴ Finance, insurance, and real estate.

² Includes oil and gas extraction.

³ Includes kinds of engineers and technicians not shown separately.

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review*, September 1987 and unpublished data.

No. 987. SCIENTISTS AND ENGINEERS—EMPLOYMENT IN INSTITUTIONS OF HIGHER EDUCATION, BY FIELD: 1980 TO 1985

[In thousands. As of January. Includes full-time and part-time personnel. Excludes graduate students who receive stipends for part-time services as scientists or engineers. R&D = research and development]

FIELD	1980	1983	1984	1985	FIELD	1980	1983	1984	1985
					Mathematical scientists	27.1	31.3	32.6	33.1
Total	399.3	373.9	385.6	396.0	Computer scientists	8.9	14.3	16.3	18.0
Universities, colleges	324.2	358.9	370.4	380.4	Life scientists ¹	133.7	151.4	156.4	161.7
Engineers ¹	33.7	37.7	38.7	39.9	Agricultural	15.9	16.7	17.1	17.5
Aeronautical ²	1.4	1.3	1.4	1.5	Biological	44.8	48.1	49.3	50.5
Chemical	2.4	2.4	2.5	2.6	Medical	67.1	74.4	76.1	78.7
Civil	5.5	6.4	6.4	6.7	Psychologists	23.3	23.8	23.8	23.8
Electrical	8.2	9.6	10.2	10.8	Social scientists	54.1	55.4	56.2	56.7
Mechanical	6.1	6.7	7.1	7.2	Economists	14.7	15.6	15.7	15.8
Physical and environmental science ¹	43.5	44.9	46.4	47.2	Federally funded R&D centers	15.1	15.1	15.2	15.6
Chemists	17.6	18.3	18.8	19.1	Engineers	6.5	6.5	6.0	6.2
Earth scientists	6.6	6.5	6.7	6.7	Scientists	8.6	8.6	9.2	9.4
Physicists	13.0	13.6	13.9	14.1					

¹ Includes other fields not shown separately.

² Includes astronomical.

Source: U.S. National Science Foundation, *Survey of Scientific and Engineering Personnel Employed in Universities and Colleges*, periodic.

No. 988. GRADUATE SCIENCE AND ENGINEERING STUDENTS IN DOCTORATE-GRANTING INSTITUTIONS, BY FIELD, ENROLLMENT STATUS, AND LEVEL OF STUDY: 1975 TO 1987

[In thousands. As of fall. Includes outlying areas]

FIELD OF SCIENCE	STUDENTS ENROLLED FULL-TIME									STUDENTS ENROLLED PART-TIME		
	Total			First year			Beyond first year					
	1975	1980	1987	1975	1980	1987	1975	1980	1987	1975	1980	1987
Total	210.3	230.5	264.9	79.2	77.3	78.3	131.2	153.2	186.6	83.4	103.1	123.8
Engineering	37.1	41.9	61.2	16.4	15.7	19.3	20.6	26.2	41.9	27.5	28.2	36.8
Physical sciences	21.3	22.2	27.6	6.0	5.7	6.5	15.3	16.5	21.1	3.1	3.1	3.3
Environmental sciences	9.0	10.3	10.2	3.3	3.4	2.5	5.7	6.9	7.7	2.0	2.5	3.3
Mathematics	10.0	9.4	12.4	3.6	3.2	3.6	6.4	6.1	8.8	4.4	4.3	3.9
Computer sciences	4.1	5.9	13.6	1.8	2.3	4.5	2.3	3.6	9.1	2.9	5.5	11.8
Life sciences	59.6	67.7	69.6	23.3	23.0	20.2	36.3	44.7	48.4	14.0	22.9	28.0
Psychology	19.7	21.6	22.7	5.7	5.7	14.0	15.9	17.0	7.2	7.8	8.8	8.8
Social sciences	49.5	51.5	48.7	19.0	18.3	16.0	30.5	33.2	32.7	22.3	28.8	27.9
Economics	8.0	8.9	8.6	3.1	2.9	2.6	4.9	6.1	6.0	3.0	3.3	2.8

Source: U.S. National Science Foundation, *Survey of Graduate Science and Engineering Students and Postdoctorates*, annual.

NO. 989. DOCTORATES CONFERRED, BY RECIPIENTS' CHARACTERISTICS, 1975 TO 1987, AND BY SELECTED SCIENCE AND ENGINEERING FIELDS, 1987

CHARACTERISTIC	ALL FIELDS					1987							
	1975	1980	1985	1986	All fields ¹	Engineering	Physical sciences ²	Mathematics	Computer sciences	Psychology	Biological sciences ³	Social sciences	
Doctorates conferred.....	32,951	31,020	31,243	31,843	32,278	3,716	3,837	740	450	3,098	3,824	823	1,758
Percent distribution.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male.....	78.1	69.7	65.7	64.6	64.8	93.5	83.3	16.6	46.7	64.7	83.0	62.3	
Female.....	21.9	30.3	34.3	35.4	35.2	6.5	16.7	14.4	53.3	35.3	17.0	37.7	
White ⁴	86.7	84.6	86.2	86.6	86.2	76.2	87.8	80.6	83.3	89.5	87.9	83.4	84.8
Asian ⁵	3.6 ⁶	4.2	4.3	4.3	4.8	17.1	6.0	10.4	9.5	1.7	5.3	8.7	4.7
Black and other ⁵	4.9	6.3	7.2	7.0	6.8	3.4	3.4	5.5	3.2	7.4	4.3	5.6	7.6
Not reported ⁵	4.8	4.9	2.3	2.1	2.2	3.3	2.8	3.5	4.0	1.4	2.5	2.3	2.9
U.S. citizens.....	82.1	81.0	74.5	72.1	70.8	41.8	65.1	46.6	54.0	87.0	77.7	50.8	68.1
Foreign citizens.....	15.9	15.9	20.9	21.0	22.2	50.7	28.5	47.6	38.7	4.6	16.9	41.1	24.0
Citizenship unknown.....	2.0	3.1	4.6	6.9	7.0	7.4	6.4	5.8	7.3	8.5	5.4	8.1	7.9
Median age at award ⁶ (yr.).....	31.5	32.2	33.3	33.5	33.6	31.0	29.8	30.8	31.7	31.1	30.8	31.8	35.5
Median total time, ⁶ baccalaureate to doctorate (yr.).....	8.6	9.3	10.2	10.4	10.4	8.1	7.1	7.9	9.1	9.9	8.1	9.0	11.8
Register time (yr.).....	5.9	6.3	6.8	6.8	6.9	5.8	5.9	6.3	6.6	7.1	6.5	6.5	7.6

NA Not available. ¹ Includes other fields, not shown separately. ² Astronomy, physics, chemistry, and earth sciences.

³ Biochemistry, botany, microbiology, physiology, zoology, and related fields. ⁴ Anthropology, sociology, political science, and international relations. ⁵ Data on race limited to U.S. citizens and non-U.S. citizens with permanent government visas. ⁶ For definition of median, see Guide to Tabular Presentation.

Source: U.S. National Science Foundation, Division of Science Resources Studies, *Survey of Earned Doctorates*.

NO. 990. NOBEL PRIZE LAUREATES IN CHEMISTRY, PHYSICS, AND PHYSIOLOGY/MEDICINE—SELECTED COUNTRIES: 1901 TO 1987

[Presented by location of award-winning research and by date of award]

COUNTRY	1901-1987					1901-1915	1916-1930	1931-1945	1946-1960	1961-1975	1976-1987
	Total	Physics	Chemistry	Physiology/Medicine							
Total.....	384	131	109	144	52	41	49	74	92	92	76
United States.....	145	49	33	63	3	3	14	38	41	41	46
United Kingdom.....	68	21	24	23	7	8	11	14	20	20	8
West Germany ¹	53	16	25	12	15	12	11	4	5	8	1
France.....	22	8	7	7	10	3	2	—	5	2	
Soviet Union.....	10	7	1	2	2	—	—	—	4	3	1
Japan.....	4	3	1	—	—	—	—	—	1	2	1
Other countries.....	82	27	18	37	15	15	11	13	13	13	15

— Represents zero. ¹ Includes East Germany before 1946.

Source: U.S. National Science Foundation, unpublished data.

NO. 991. FEDERAL SPACE PROGRAM—BUDGET AUTHORITY, BY AGENCY: 1960 TO 1988

[In millions of dollars, except percent. For fiscal years ending in year shown; see text, section 9. NASA=National Aeronautics and Space Administration]

YEAR	Total	NASA ¹		DEFENSE		YEAR	Total	NASA ¹		DEFENSE		Other	
		Total	Percent of total	Total	Percent of total			Total	Percent of total	Total	Percent of total		
1960.....	1,066	462	43.3	561	52.6	43	1977.....	5,983	3,440	57.5	2,412	40.3	131
1965.....	6,956	5,138	73.9	1,574	22.6	244	1978.....	6,518	3,623	55.6	2,738	42.0	157
1966.....	6,970	5,065	72.7	1,689	24.2	217	1979.....	7,244	4,030	55.6	3,036	41.9	178
1967.....	6,710	4,830	72.0	1,664	24.8	216	1980.....	8,689	4,680	53.9	3,848	44.3	160
1968.....	6,529	4,430	67.9	1,922	29.4	177	1981.....	9,978	4,992	50.0	4,828	48.4	158
1969.....	5,976	3,822	64.0	2,013	33.7	141	1982.....	12,441	5,528	44.4	6,679	53.7	234
1970.....	5,341	3,547	66.4	1,678	31.4	115	1983.....	15,589	6,328	40.6	9,019	57.9	242
1971.....	4,741	3,101	65.4	1,512	31.9	127	1984.....	17,136	6,648	38.8	10,195	59.6	293
1972.....	4,575	3,071	67.1	1,407	30.8	97	1985.....	20,167	6,925	34.3	12,768	63.3	474
1973.....	4,825	3,093	64.1	1,623	33.6	109	1986.....	21,659	7,165	33.1	14,126	65.2	368
1974.....	4,640	2,759	59.4	1,766	39.1	116	1987.....	25,876	9,809	37.9	15,717	60.7	350
1975.....	4,914	2,915	59.3	1,892	38.5	107	1988.....	26,409	8,756	33.2	17,196	65.1	457
1976 ²	6,660	4,075	61.2	2,444	36.7	142							

¹ Includes budget authority for the space transportation system of \$3.1 billion in 1982; \$4.1 billion in 1983; and \$4.0 billion in 1984.

² Includes transition quarter, July 1 to Sept. 30, 1976.

³ Estimated.

Source: U.S. National Aeronautics and Space Administration, *Aeronautics and Space Report of the President*, annual. Data from U.S. Office of Management and Budget.

NO. 992. SPACE VEHICLE SYSTEMS—NET SALES AND BACKLOG ORDERS: 1965 TO 1986

[In millions of dollars. Backlog orders as of Dec. 31. Based on data from major companies engaged in manufacture of aerospace products. Includes parts but excludes engines and propulsion units]

YEAR	NET SALES			BACKLOG ORDERS			YEAR	NET SALES			BACKLOG ORDERS		
	Total	Military	Non-military	Total	Military	Non-military		Total	Military	Non-military	Total	Military	Non-military
1965.....	2,449	602	1,847	2,203	503	1,700	1982.....	4,749	2,606	2,143	4,337	2,403	1,934
1970.....	1,956	1,025	931	1,184	786	398	1983.....	4,940	2,420	2,520	4,865	2,733	2,132
1975.....	2,119	1,096	1,023	1,304	1,019	285	1984.....	5,225	3,019	2,206	4,824	3,099	1,525
1980.....	3,483	1,461	2,022	1,814	951	863	1985.....	6,300	4,241	2,059	6,707	4,941	1,766
1981.....	3,856	1,736	2,120	3,174	2,164	1,010	1986.....	6,304	4,579	1,725	8,083	6,028	1,2035

¹ Includes data for non-military missile systems and parts.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, MA-37D, *Aerospace Industry (Orders, Sales, and Backlog)*.

NO. 993. NATIONAL AERONAUTICS AND SPACE ADMINISTRATION—BUDGET SUMMARY: 1986 TO 1988

[In millions of dollars]

ITEM	1986	1987	1988	ITEM	1986	1987	1988
Appropriations, total	7,764	10,576	9,027	Space flight, control and data communication programs	3,670	5,815	3,811
Research and development	2,619	3,128	3,295	Space Shuttle production and operational capability	1,370	3,105	1,088
Space Science and applications	1,476	1,553	1,576	Orbiter	397	373	329
Physics and astronomy	569	553	611	Propulsion systems	793	464	595
Life sciences	66	72	70	Launch and mission support	180	148	165
Planetary exploration	354	358	329	Orbiter replacement	—	2,100	—
Space applications	487	569	566	Changes and systems upgrade	—	20	—
Environmental observations	272	321	314	Space transportation operations	1,640	1,847	1,810
Safety, reliability, and quality assurance	—	9	14	Flight hardware	891	936	777
Commercial programs	27	41	74	Flight operations	434	558	584
Space transportation capability development	404	496	610	Launch and landing operations	315	353	450
Upper stages	122	161	155	Expendable launch vehicles	—	—	28
Engineering and technical base	110	133	134	Space and ground network, communications and data systems	660	863	884
Space lab	78	74	67	Space network	274	407	436
Aeronautics and space technology	496	592	612	Ground network	210	250	232
Aeronautical research and technology	337	421	388	Communications and data systems	176	206	217
Space research and technology	159	171	224	Research and program management	1,342	1,467	1,743
Space station	200	420	392	Construction of facilities	133	166	178
Tracking and data advanced systems	16	17	18				

[—] Represents or rounds to zero. ¹ Includes other items not shown separately.

Source: U.S. National Aeronautics and Space Administration, *NASA News*.

NO. 994. NASA—OUTLAYS FOR OPERATIONAL ACTIVITIES AND FOR RESEARCH AND DEVELOPMENT: 1965 TO 1987

[In millions of dollars, except percent. For fiscal year ending in year shown; see text, section 9. Minus sign (—) indicates decrease]

YEAR	AGENCY TOTAL		PERFORMANCE (OPERATIONS)			PERFORMANCE (R&D)				FACILITIES (R&D)			
	Total outlays	Percent change ¹	Total operations	Space flight	Other	Total	Space flight	Space science, applications ²	Air transport and other	Total R&D	Space flight	Space science, applications ²	Air transport and other
1965.....	5,093	22.1	(3)	(3)	(3)	3,4562	3,138	3,126	3,298	531	401	78	52
1970.....	3,753	-11.7	(3)	(3)	(3)	3,699	3,215	3,063	3,541	54	14	21	19
1975.....	3,266	.3	(3)	(3)	(3)	3,181	3,150	3,076	3,606	65	35	9	42
1980.....	4,850	15.8	1,245	914	331	3,465	1,642	1,341	482	140	38	5	97
1983.....	6,664	10.4	4,018	3,431	587	2,538	596	1,486	456	108	26	-	82
1984.....	7,048	5.8	3,317	2,854	463	3,539	1,183	1,667	689	192	44	20	128
1985.....	7,251	2.9	4,034	4,310	724	2,970	542	1,834	594	247	70	23	154
1986.....	7,404	2.1	3,673	2,947	726	3,432	740	2,101	591	299	107	26	166
1987.....	7,591	2.5	4,027	3,250	777	3,250	768	1,583	899	314	119	25	170

¹ Represents zero. ² Change from immediate prior year. ² Includes technology. ³ Performance (operations) included in performance (R&D). ⁴ Excludes intragovernmental funds, Federal Financing Bank, direct loan principle repayments—\$67 million in 1985.

Source: U.S. Office of Management and Budget, *Budget of the United States Government*, annual.

NO. 995. NASA—PERMANENT PERSONNEL DISTRIBUTION SUMMARY: 1975 TO 1987

CODE AND INSTALLATION	1975	1980	1983	1984	1985	1986	1987		
							Total	Percent male	Percent Black
Total	24,333	22,813	21,924	21,415	21,423	21,228	21,831	73.2	8.2
Professional	15,169	14,749	14,664	14,410	14,819	14,803	15,482	91.3	5.5
Scientists and engineers, aerospace technicians	11,438	10,779	10,779	10,605	10,884	10,925	11,450	69.2	3.8
Administrators	3,504	3,539	3,569	3,526	3,675	3,656	3,803	57.1	10.8
Scientists and engineers, non aerospace technicians	180	377	264	226	209	171	178	88.8	6.7
Life sciences	47	54	52	53	51	51	51	76.5	7.8
Non-professional	9,184	7,864	7,260	7,005	6,804	6,425	6,349	53.5	14.6
INSTALLATION									
Headquarters	1,562	1,516	1,505	1,408	1,383	1,362	1,532	56.0	20.5
Ames Research Center, CA ²	2,161	2,116	2,083	2,093	2,052	2,072	2,079	76.6	4.7
Lewis Research Center, Cleveland, OH	3,042	2,822	2,676	2,650	2,715	2,588	2,663	81.8	6.1
Langley Research Center, Hampton, VA	3,315	2,966	2,968	2,873	2,827	2,814	2,851	77.8	9.2
Goddard Space Flight Center, MD ³	4,185	3,818	3,718	3,581	3,629	3,679	3,648	73.3	9.2
Marshall Space Flight Center, AL	4,100	3,563	3,412	3,264	3,284	3,260	3,384	71.8	6.8
National Space Technology Labs, MS	89	103	111	112	122	123	137	88.6	9.8
Johnson, Houston, TX	3,660	3,508	3,305	3,316	3,330	3,289	3,349	70.3	7.3
Kennedy, FL	2,259	2,201	2,146	2,118	2,081	2,051	2,188	72.4	5.4

¹ Excludes Hispanic Blacks. ² Includes Flight Research Center, California. ³ Includes Wallops Flight Research Center, Virginia.

Source: U.S. National Aeronautics and Space Administration, 1975-1985, *Personnel Management Information System (PMIS)*, annual; beginning 1986, *The Civil Service Work Force*, annual.

NO. 996. SPACE SHUTTLE SYSTEM EXPENDITURES BY NASA IN CONSTANT (1982) DOLLARS:
1972 TO 1987

[In millions of dollars. For year ending Sept. 30. These data cannot be used alone to estimate the total shuttle cost. Only operating expenditures correspond to an annual cost in the economic sense, and even those estimates require adjustment for the three-year period over which the cost of a shuttle flight is incurred and reimbursements are received. For details, see source]

YEAR	Total	D.D.T. and E. ¹	Con- struction	Pro- duction	Operations	YEAR	Total	D.D.T. and E. ¹	Con- struction	Pro- duction	Operations
1972.....	40	-	40	-	-	1980.....	2,751	1,239	42	907	463
1973.....	58	-	58	-	-	1981.....	2,724	1,041	13	1,093	578
1974.....	325	216	109	-	-	1982.....	2,932	894	20	1,283	735
1975.....	1,543	1,407	136	-	-	1983.....	3,014	-	26	1,635	1,354
1976.....	2,619	2,541	79	-	-	1984.....	3,127	-	73	690	2,364
1977.....	2,258	2,089	60	103	-	1985.....	2,636	-	42	1,976	1,218
1978.....	2,062	1,898	103	61	-	1986.....	3,311	-	-	1,504	1,807
1979.....	2,251	1,713	42	496	-	1987.....	5,806	-	-	3,841	1,965

- Represents zero.

¹ Design, development, testing, and evaluation.

Source: U.S. Congress, Congressional Budget Office, estimate March 1985 and U.S. National Aeronautics and Space Administration, *NASA Budget Estimates for Fiscal Year 1989*.

NO. 997. WORLD-WIDE SUCCESSFUL SPACE LAUNCHES: 1957 TO 1987

[Criterion of success is attainment of Earth orbit or Earth escape. E.S.A.=European Space Agency]

YEAR	Total ¹	Sovi- et Union	Unit- ed States	Japan	E.S.A.	India	China: Main- land	YEAR	Total ¹	Sovi- et Union	Unit- ed States	Japan	E.S.A.	India	China: Main- land
Total.....	2,976	2,016	875	34	16	3	19	1975-1979...	607	461	126	10	1	-	6
1957-1959..	21	6	15	-	-	-	-	1980-1984...	605	483	93	12	8	3	6
1960-1964..	268	76	192	-	-	-	-	1985.....	121	97	17	2	3	-	1
1965-1969..	586	302	279	-	-	-	-	1986.....	103	91	6	2	2	-	2
1970-1974..	555	405	138	5	-	-	2	1987.....	110	95	8	3	2	-	2

- Represents zero.

¹ Includes launches in other countries not shown separately.

Source: Library of Congress, Congressional Research Service, Science Policy Research Division, *Space Activities of the United States, Soviet Union and Other Launching Countries/Organization: 1957-1987*, February 1988.

Section 21

Transportation— Land

This section presents statistics on revenues, passenger and freight traffic volume, and employment in various revenue-producing modes of the transportation industry, including motor vehicles, trains, and pipelines. Data are also presented on commuting travel; highway mileage and finances; motor vehicle travel, accidents, sales, and registrations; automobile operating costs; and characteristics of public transit, railroads, and pipelines.

The principal compiler of data on public roads and on operation of motor vehicles is the U.S. Department of Transportation's (DOT) Federal Highway Administration (FHWA). These data appear in FHWA's annual *Highway Statistics* and other publications. The U.S. Interstate Commerce Commission (ICC) presents data on interstate land transport in its publications, the *Annual Report to Congress* and the *Transport Statistics in the United States*, which contain data on railroads and motor carriers subject to ICC regulations.

The U.S. National Highway Traffic Safety Administration issues data on traffic accident deaths and death rates in two annual reports: the *Fact Book* and the *Fatal Accident Reporting System Annual Report*. DOT's Federal Railroad Administration presents data on accidents involving railroads in its annual *Accident/Incident Bulletin*, and the *Rail-Highway Crossing Accident/Incident and Inventory Bulletin*.

Various censuses and surveys conducted by the U.S. Bureau of the Census also provide data. Results of the censuses of transportation are presented in the *Truck Inventory and Use Survey*. The *Annual Survey of Manufactures* and reports of the censuses of manufacturers, wholesale and retail trade, and service industries contain statistics on the motor vehicle and equipment industry and on retail, wholesale, and services aspects of this industry. Data on persons commuting to work were collected as part of the 1980 census and are in various census reports.

Data are also presented in many nongovernment publications. Among them are: The weekly and annual *Cars of Revenue Freight Loaded* and the annual *Yearbook of Railroad Facts*, both published by the Association of American Railroads, Washington, DC; *Bus Facts*, issued annually by the American Bus Association, Washington, DC; and the *Transit Fact Book*, containing electric railway and motorbus statistics, published annually by the American Public Transit Association, Washington, DC. Useful annual handbooks in the field of transportation are *Motor Vehicle Facts and Figures* and *World Motor Vehicle Data*, issued by the Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, MI; *Accident Facts*, issued by the National Safety Council, Chicago, IL; and *Transportation in America*, issued by the Transportation Policy Associates, Washington, DC.

Urban and rural highway mileage.—Beginning 1980, mileage is classified in urban and rural categories, rather than municipal and rural. Urban denotes the Federal-aid legislation definition of an area. Such areas include, as a minimum, a census place with a population of 5,000 to 49,999 or a designated urbanized area with a population of 50,000 or more. These Federal-aid urban areas may extend beyond corporate and census boundaries, and thus are not necessarily coextensive with municipal boundaries. Rural in 1980 refers to non-Federal-aid urban area mileage. Prior to 1980, municipal referred to roads within incorporated places, densely populated New England towns, and certain of the more populous unincorporated areas and rural to non-municipal roads.

Federal-aid highway systems.—Federal law provides that Federal funds be matched in varying proportions with State funds for the costs of planning, engineering, right-of-way acquisition, and construction of highways. Other costs, such as maintenance and policing, are borne entirely by the States and local agencies.

Effective July 1, 1976, a uniform road classification system was implemented which shortened the mileage of the highway system and redefined the three main systems of Federal-aid routes. The Federal-aid primary system is comprised of a network of main roads important to interstate, statewide, and regional travel. The system consists of main rural roads and their extensions into or through urban areas. The Federal-aid secondary system consists of rural roads of a more local nature, such as those which connect county seats and the larger population centers not served by the primary system. The Federal-aid urban system is located in urban places of 5,000 or more persons and consists of major urban roads and streets, except those on the primary system.

Regulatory bodies.—The ICC, created by the U.S. Congress to regulate transportation in interstate commerce, has jurisdiction over railroads, trucking companies, bus lines, freight forwarders, water carriers, coal slurry pipelines, and transportation brokers. The Federal Energy Regulatory

Commission is responsible for setting rates and charges for transportation and sale of natural gas and for establishing rates or charges for transportation.

Motor carriers.—For 1960-1973, class I for-hire motor carriers of freight were classified by the ICC as those with \$1 million or more of gross annual operating revenue; 1974-1979, the class I minimum was \$3 million. Effective January 1, 1980 class I carriers are those with \$5 million or more in revenue. For 1960-1968, class I motor carriers of passengers were classified by the ICC as those with \$200,000 or more of gross annual operating revenue; for 1969-1976, as those with revenues of \$1 million or more; and since 1977, as those with \$3 million or more. Effective January 1, 1988 class I motor carriers of passengers are those with \$5 million or more in operating revenues; class II less than \$5 million in operating revenues.

Railroads.—Railroad companies reporting to the ICC are divided into specific groups as follows: (1) Regular line-haul (interstate) railroads (and their non-operating subsidiaries); (2) switching and terminal railroads; (3) private railroads prior to 1964 (identified by ICC as "circular" because they reported on brief circulars); and (4) unofficial railroads, so designated when their reports are received too late for tabulation. For the most part, the last 3 groups are not included in the statistics shown here.

For years prior to 1978, class I railroads were those with annual revenues of \$1 million or more for 1950-1955; \$3 million or more for 1956-1964; \$5 million or more for 1965-1975; and \$10 million or more for 1976-1977. In 1978, the classification became class I, those having more than \$50 million gross annual operating revenue; class II, from \$10 million to \$50 million; and class III, less than \$10 million. Effective January 1, 1982, the ICC adopted a procedure to adjust the threshold for inflation by restating current revenues in constant 1978 dollars. In 1987, the criteria for class I and class II railroads were \$87.9 million and \$17.6 million, respectively. Also effective January 1, 1982, the ICC adopted a *Carrier Classification Index Survey Form* for carriers not filing annual report form R-1 with the commission. Class II and class III railroads are currently exempted from filing any financial report with the Commission. The form is used for reclassifying carriers.

Statistical reliability.—For a discussion of statistical collection and estimation, sampling procedures, and measures of statistical reliability, see Appendix III.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

NO. 998. PASSENGER AND FREIGHT TRANSPORTATION OUTLAYS, BY TYPE OF TRANSPORT: 1970 TO 1987

(In billions of dollars. Freight data include outlays for mail and express. ICC=Interstate Commerce Commission)

TYPE OF TRANSPORT	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987, est.
Total outlays ¹	195.6	297.8	446.1	492.4	540.9	595.8	588.7	638.7	706.0	755.6	766.8	779.7
Passenger, total.....	114.9	157.4	279.3	307.6	338.9	373.5	377.7	409.0	455.7	493.5	498.7	504.7
Private transportation.....	99.6	161.3	241.9	268.3	284.8	317.4	320.6	347.2	387.0	419.3	424.4	424.6
Automobiles ²	97.0	156.6	235.9	256.8	276.7	308.0	312.4	339.8	378.0	411.0	416.3	417.4
New and used cars.....	32.1	46.0	80.4	77.1	73.3	82.6	85.7	105.6	125.7	139.3	156.0	147.4
Tires, tubes, accessories.....	7.1	12.4	17.2	19.8	22.2	24.6	24.9	26.9	27.5	29.4	29.4	30.0
Gasoline and oil.....	29.9	53.9	60.3	78.3	99.7	111.3	106.3	105.9	106.7	108.9	88.6	94.2
Insurance less claims.....	4.4	4.5	10.2	10.3	11.5	10.8	11.2	12.5	12.0	11.6	14.7	15.0
Interest on debt.....	4.7	7.3	12.8	15.4	17.5	21.0	21.8	19.6	25.1	26.7	25.4	25.0
Registration and operator's permit fees.....	1.9	2.3	3.0	3.1	3.3	3.5	3.8	4.1	4.5	5.3	5.6	5.6
Repair, greasing, washing, parking, tolls ³	13.2	22.1	33.0	36.7	38.0	41.5	43.5	45.7	50.4	56.8	60.9	62.0
Air.....	2.6	4.7	5.9	7.1	8.1	9.4	9.2	7.4	8.2	8.3	7.6	7.2
For-hire transportation.....	15.3	26.2	37.3	43.3	52.2	56.1	57.1	61.8	68.7	74.2	75.2	80.1
Local ⁴	5.4	10.5	13.9	15.4	18.5	20.4	21.3	22.3	23.6	27.7	28.5	28.6
Bus and transit ⁵	1.8	4.7	6.7	7.5	9.2	10.1	10.3	11.4	11.7	13.1	15.4	16.2
School bus.....	1.2	2.2	2.7	3.2	3.8	4.7	5.0	5.2	5.8	6.1	6.3	6.3
Taxi.....	2.1	3.4	4.3	4.5	5.2	5.2	5.6	5.3	5.5	5.6	6.0	6.3
Intercity.....	7.7	12.9	19.6	23.3	28.4	30.6	30.5	33.5	38.5	39.5	39.6	43.6
Air.....	6.6	11.2	17.1	20.4	25.1	26.8	26.8	29.7	33.6	35.9	36.2	40.5
Rail ⁶.....	.3	.6	1.3	1.4	1.6	1.9	1.8	1.8	1.8	1.6	1.5	1.4
Bus.....	.8	1.0	1.2	1.4	1.7	1.8	1.9	2.0	2.0	2.0	1.9	1.7
International.....	2.2	2.7	3.8	4.6	5.3	5.3	5.4	6.0	6.6	7.0	7.1	7.9
Freight, total ¹	83.8	115.5	174.0	192.9	212.1	234.6	220.9	240.5	262.1	274.8	279.7	287.8
Highway.....	62.5	84.8	128.8	142.7	155.4	173.3	162.7	180.5	195.6	208.6	214.1	220.3
Truck, intercity.....	33.6	47.4	79.6	90.2	94.6	100.2	99.9	111.1	120.7	126.2	129.1	132.8
Truck, local.....	28.8	37.3	49.1	52.3	60.5	72.8	62.5	69.2	74.7	82.2	84.8	87.3
Rail.....	11.9	16.5	21.9	24.8	27.7	30.5	27.1	27.3	30.5	29.2	27.8	28.4
Water.....	5.1	7.8	12.4	13.4	14.8	15.7	16.6	17.2	17.8	18.7	18.9	19.0
Oil pipeline.....	1.4	2.2	5.5	6.2	7.1	7.4	7.9	8.3	8.7	8.9	8.1	8.3
Air carrier.....	1.2	1.8	2.7	2.8	4.0	4.3	4.4	5.0	6.0	6.8	7.5	8.4

¹ Total outlays less than sum of passenger and freight totals, as estimated freight costs included in costs of new cars, gasoline, oil, tires, and tubes have been excluded to prevent duplication. ² Includes business-owned vehicles. ³ Includes storage and rental. ⁴ Includes items not shown separately. ⁵ Includes Federal, State and local government operating subsidies and capital grants. ⁶ Includes Federal operating subsidies and capital grants for Amtrak.

Source: Transportation Policy Associates, Washington, DC, *Transportation in America*, March 1988, with periodic supplements. (Copyright.)

Employment and Earnings in Transportation—Traffic Volume 589

No. 999. EMPLOYMENT AND EARNINGS IN TRANSPORTATION, BY INDUSTRY: 1970 TO 1987

[Annual averages of monthly figures. Based on Current Employment Statistics program; see Appendix III. See also *Historical Statistics, Colonial Times to 1970*, series Q 36-42]

SIC ¹ code	INDUSTRY	1970	1975	1980	1982	1983	1984	1985	1986	1987
NUMBER (1,000)										
(x)	Total.....	2,684	2,636	2,962	2,788	2,745	2,917	3,003	3,058	3,166
40	Railroads.....	634	548	532	429	376	376	359	332	309
4011	Class I railroads.....	566	498	482	398	348	345	323	294	271
41	Local and interurban passengers.....	269	270	265	263	257	271	278	287	295
421, 3	Trucking, incl. terminals.....	999	1,024	1,189	1,125	1,132	1,227	1,287	1,297	1,356
422	Public warehousing.....	84	84	91	84	85	91	98	99	108
44	Water transportation.....	213	195	213	202	191	191	186	176	176
45	Air transportation.....	352	363	453	444	455	489	522	567	604
46	Pipelines, exc. natural gas.....	18	18	21	21	20	19	19	18	18
47	Transportation services.....	115	134	198	220	229	253	276	282	299
AVERAGE WEEKLY EARNINGS (dol.)										
4011	Class I railroads.....	172	262	427	484	542	573	595	608	627
41	Local and interurban passengers.....	(NA)	148	217	248	252	258	281	274	282
421, 3	Trucking, incl. terminals.....	164	247	366	401	408	415	412	415	421
422	Public warehousing.....	121	171	248	277	288	306	315	318	326
46	Pipelines, exc. natural gas.....	189	280	441	536	586	597	629	637	644

NA Not available. ¹ Standard Industrial Classification, see text, section 13.

Source: U.S. Bureau of Labor Statistics, *Employment and Earnings*, monthly.

No. 1000. VOLUME OF DOMESTIC INTERCITY FREIGHT AND PASSENGER TRAFFIC, BY TYPE OF TRANSPORT: 1970 TO 1987

[A ton-mile is the movement of 1 ton (2,000 pounds) of freight for the distance of 1 mile. A passenger-mile is the movement of 1 passenger for the distance of 1 mile. Comprises public and private traffic, both revenue and nonrevenue. See also *Historical Statistics, Colonial Times to 1970*, series Q1-22]

TYPE OF TRANSPORT	1970	1973	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987 ¹
FREIGHT TRAFFIC (bil. ton-miles)													
Total	1,936	2,232	2,066	2,467	2,573	2,487	2,430	2,252	2,337	2,515	2,458	2,501	2,673
Railroads.....	771	858	759	868	927	932	924	810	841	935	895	889	976
Motor vehicles.....	412	505	454	599	608	555	527	520	575	606	610	634	666
Inland waterways ²	319	358	342	409	425	407	410	351	359	399	382	393	435
Oil pipelines.....	431	507	507	586	608	588	564	566	556	568	554	578	587
Domestic airways ³	3.3	4.0	3.7	4.8	4.6	4.8	5.1	5.1	5.9	6.5	6.7	7.3	8.7
PERCENT DISTRIBUTION													
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Railroads.....	39.82	38.44	36.74	35.18	36.03	37.47	36.02	36.00	35.99	37.18	36.41	35.65	36.51
Motor vehicles.....	21.28	22.63	21.97	24.28	23.64	22.32	21.69	23.11	24.50	24.10	24.82	25.35	24.91
Inland waterways ²	16.48	16.04	16.55	16.58	16.52	16.37	16.87	15.60	15.36	15.88	15.54	15.71	16.27
Oil pipelines.....	22.26	22.72	24.54	23.75	23.64	23.64	23.21	25.16	23.79	22.58	22.95	23.11	21.97
Domestic airways ³ .....	.17	.18	.19	.19	.18	.19	.21	.23	.25	.26	.28	.28	.34
PASSENGER TRAFFIC (bil. passenger-miles)													
Total	1,181	1,341	1,354	1,602	1,590	1,558	1,573	1,609	1,645	1,687	1,744	1,806	1,870
Private automobiles.....	1,026	1,163	1,171	1,362	1,322	1,300	1,319	1,345	1,364	1,388	1,418	1,450	1,494
Domestic airways ⁴	119	143	148	203	228	219	216	227	245	263	291	320	341
Bus ⁵	25	26	25	26	28	27	27	27	26	25	24	24	23
Railroads ⁶	11	9	10	11	12	11	11	10	10	10	11	12	12
PERCENT DISTRIBUTION													
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Private automobiles.....	86.88	86.73	88.48	85.02	83.14	83.44	83.80	83.53	82.82	82.28	81.31	80.29	79.89
Domestic airways ⁴	10.08	10.66	10.93	12.67	14.34	14.06	13.72	14.11	14.88	15.59	16.88	17.72	18.24
Bus ⁵	2.12	1.94	1.85	1.62	1.78	1.73	1.72	1.68	1.64	1.48	1.38	1.33	1.23
Railroads ⁶ .....	.93	.67	.74	.69	.75	.71	.76	.68	.67	.65	.63	.66	.64

¹ Preliminary. ² Includes Great Lakes and inland waterways, but not coastwise traffic. ³ Revenue service only for scheduled and non-scheduled carriers, with small section 418 all-cargo carriers included from 1978. Includes express, mail, and excess baggage. ⁴ Includes general aviation (mostly private business) flying. ⁵ Excludes school and urban transit buses. ⁶ Includes electric railways and rail commuter service.

Source: Transportation Policy Associates, Washington, DC, *Transportation in America*, March 1986, with periodic supplements. (Copyright.)

Transportation—Land

NO. 1001. TRANSPORTATION ACCIDENTS, AND RESULTING DEATHS AND INJURIES, BY TYPE OF TRANSPORT: 1970 TO 1987

[For motor vehicle data, see also tables 1018 and 1019; for railroad data, see also table 1037; for air carrier and general aviation data, see also tables 1044 and 1050]

YEAR AND CASUALTY	Total (1,000)	Motor vehicle (1,000)	Railroad ²	TYPE OF TRANSPORT								Hazardous materials ¹¹	
				Air carriers				General aviation ⁶	Recreational boating ⁷	Gas pipelines ⁸	Liquid pipelines ⁹	Water-borne ¹⁰	
				Total	Air-lines ³	Commuter air carriers ⁴	On-demand air carriers ⁵						
Accidents:													
1970.....	16,013	16,000	8,095	(NA)	(NA)	(NA)	(NA)	3,803	1,019	351	(NA)	(NA)	
1975.....	16,524	16,500	8,041	237	37	48	152	3,995	6,308	1,373	254	3,310	10,951
1980.....	17,925	17,800	8,451	228	19	38	171	3,590	5,513	1,988	219	4,824	15,737
1981.....	18,020	18,000	5,781	214	26	31	157	3,500	5,208	1,695	239	3,503	10,070
1982.....	18,118	18,100	4,589	178	19	26	132	3,231	5,377	1,711	200	3,174	6,636
1983.....	18,319	18,300	3,906	184	24	18	140	3,060	5,569	1,575	161	4,704	5,845
1984.....	18,817	18,800	3,900	185	16	22	146	3,008	5,700	965	188	3,275	5,776
1985.....	19,348	19,300	3,275	196	23	22	152	2,745	6,237	331	183	3,439	6,014
1986.....	19,320	17,700	2,620	155	23	15	117	2,581	6,407	227	210	3,026	5,758
1987.....	(NA)	(NA)	2,513	166	35	34	97	2,465	6,746	230	235	(NA)	6,215
Deaths:													
1970.....	54.8	52.8	785	(NA)	(NA)	(NA)	(NA)	1,418	22	4	(NA)	(NA)	
1975.....	48.2	44.5	575	221	124	28	69	1,252	1,466	14	7	243	27
1980.....	54.5	51.1	584	143	1	37	105	1,239	1,360	11	3	206	19
1981.....	52.5	49.3	556	132	4	34	94	1,282	1,206	17	5	154	25
1982.....	47.2	43.9	512	320	234	14	72	1,182	1,178	31	-	223	12
1983.....	45.7	42.6	498	89	15	12	62	1,081	1,241	12	6	289	8
1984.....	44.6	44.3	598	102	4	46	52	1,115	1,063	35	-	113	7
1985.....	47.3	43.8	454	640	526	37	77	976	1,116	28	5	121	8
1986.....	48.8	46.1	475	75	4	4	67	955	1,066	36	4	162	16
1987.....	(NA)	46.3	540	354	232	60	62	804	1,036	11	-	(NA)	13
Injuries:													
1970.....	2,024	2,000	21,327	(NA)	(NA)	(NA)	(NA)	780	347	21	(NA)	(NA)	
1975.....	1,858	1,800	54,306	109	71	6	32	728	2,136	819	17	97	648
1980.....	2,066	2,000	62,246	74	17	14	43	676	2,650	310	15	176	626
1981.....	1,956	1,900	53,003	82	21	24	37	597	2,474	74	22	141	643
1982.....	1,741	1,700	37,638	98	31	28	39	620	2,682	220	8	271	130
1983.....	1,636	1,600	32,196	49	8	12	29	566	2,913	242	8	209	193
1984.....	1,739	1,700	35,660	67	9	23	35	595	2,709	229	19	134	257
1985.....	1,705	1,700	31,592	92	33	16	43	517	2,757	121	17	187	253
1986.....	1,829	1,800	24,466	65	22	12	31	540	2,847	124	32	240	316
1987.....	(NA)	1,800	23,533	88	53	16	19	477	3,501	128	17	(NA)	338

¹ Represents zero. ² NA Not available. ³ Data on deaths are from U.S. National Highway Traffic Safety Administration and are based on 30 day definition; see table 1018. Other data are from National Safety Council. ⁴ Train accidents cover only those accidents which result in damages to railroad property exceeding amounts specified by the U.S. Federal Railroad Administration. The reporting threshold was raised from \$750 to \$1,750 in 1975; to \$2,900 in 1979; to \$3,700 in 1981; to \$4,500 in 1983; and to \$4,900 in 1985. Grade crossing accidents are also included when classified as a train accident. Deaths exclude fatalities in railroad-highway grade crossing accidents. ⁵ Includes scheduled and non-scheduled (charter) air carriers operating under 14 CFR 121, 125, and 127. Injuries include only serious injuries. ⁶ All scheduled service operating under 14 CFR 135. Injuries include only serious injuries. ⁷ All non-scheduled service operating under 14 CFR 135. Injuries include only serious injuries. ⁸ 1975-1984 data exclude commuter and on-demand air taxis operating under 14 CFR 135. ⁹ Accidents are required to be reported to the U.S. Coast Guard whenever they result in a death; a person being injured or receiving medical treatment beyond first aid; damages exceed \$200; or a person's disappearance. ¹⁰ Pipeline accidents/incidents are credited to the year in which they occurred beginning with 1983 data; prior data are credited to the year the accident/incident reports were filed. Fatalities and injuries as reported in annual report. ¹¹ Pipelines carrying hazardous materials, petroleum, and liquid petroleum products. ¹² Covers accidents involving commercial vessels which must be reported to U.S. Coast Guard if there is property damage exceeding \$1,500; material damage affecting the seaworthiness or efficiency of a vessel; stranding or grounding; loss of life; or injury causing a person's incapacity for more than 3 days. ¹³ Accidents, deaths, and injuries involving hazardous materials cover all types of transport.

Source: U.S. Dept. of Transportation, Transportation Systems Center, Cambridge, MA, *Transportation Safety Information Report*, annual.

NO. 1002. FEDERAL OUTLAYS FOR TRANSPORTATION, BY FUNCTION: 1970 TO 1988

[In millions of dollars. For fiscal years ending in year shown; see text, section 9]

FUNCTION	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988, est.
Total outlays.....	7,008	10,918	17,532	21,329	23,379	20,625	21,334	23,669	25,838	28,117	26,228	27,237
Percent of total outlays.....	3.6	3.3	3.5	3.6	3.4	2.8	2.6	2.8	2.7	2.8	2.6	2.6
Average annual percent change ¹	7.4	18.0	13.0	21.7	9.6	-11.8	3.4	10.9	9.2	8.8	-6.7	3.8
Ground transportation.....	4,678	7,027	12,115	15,274	17,074	14,321	14,265	16,158	17,606	18,725	17,157	17,797
Air transportation.....	1,408	2,387	3,355	3,723	3,814	3,526	4,000	4,415	4,895	5,287	5,520	5,014
Water transportation.....	895	1,430	1,969	2,229	2,381	2,687	2,968	3,010	3,201	3,964	3,461	3,293
Other transportation.....	28	74	93	104	110	90	99	85	137	140	91	133

¹ Change from immediate prior year.

Source: U.S. Office of Management and Budget, *Budget of the United States Government*, annual.

Highway Mileage

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No. 1003. HIGHWAY MILEAGE—URBAN AND RURAL, BY TYPE OF CONTROL, AND FEDERAL-AID HIGHWAY SYSTEM: 1960 TO 1986

[In thousands, except percent. As of Dec. 31. Beginning 1980, data for urban and rural mileage are not comparable to prior years because of classification changes; see text, section 21. See also *Historical Statistics, Colonial Times to 1970*, series Q 50, 51, and 55]

TYPE AND CONTROL	1960	1965	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986
Total mileage ¹	3,546	3,690	3,730	3,838	3,918	2 ³ ,955	3,853	3,866	3,880	3,892	3,862	3,880
Urban mileage ³	430	508	561	639	694	624	632	641	662	674	691	701
Under State control	50	65	74	84	86	79	90	103	100	103	111	94
Under local control	379	442	487	555	607	543	540	536	562	571	578	606
Rural mileage	3,116	3,183	3,189	3,199	3,224	2 ³ ,931	3,221	3,226	3,217	3,218	3,171	3,178
Percent surfaced ⁴	69.5	72.3	76.1	77.6	77.5	77.5	86.1	85.7	86.0	87.5	88.1	88.4
Under State control	659	687	707	711	697	702	726	825	817	818	773	704
Under local control	2,345	2,346	2,275	2,261	2,281	2,270	2,238	2,198	2,134	2,173	2,243	
Under Federal control	112	150	188	227	244	262	256	261	262	266	225	231
Federal-aid highway system: ⁶												
Primary	265	268	272	266	303	300	298	298	300	300	301	303
Interstate	10	21	32	37	40	41	42	42	43	43	44	44
Urban	(x)	(x)	(x)	65	124	124	129	134	137	140	144	146
Secondary	601	640	647	643	397	398	401	402	397	398	398	398

X Not applicable. ¹ Prior to 1980, includes public and nonpublic road mileage; beginning 1981, includes only public road mileage as defined in 23 USC 402. ² Includes 98,000 miles of nonpublic road mileage previously contained in other rural categories. ³ Prior to 1980, represents municipal mileage; see text, section 21. ⁴ Covers soil-surfaced roads and roads with slag, gravel, stone, bituminous, or concrete surfaces. ⁵ Incomplete reporting from Alaska, Missouri, and Pennsylvania for control accounts for changes between 1981 and 1982. ⁶ For definition, see text, section 21. Beginning 1979, data represent actual mileage open to traffic rather than total highway miles carrying interstate traffic.

Source: U.S. Federal Highway Administration, *Highway Statistics*, annual.

NO. 1004. HIGHWAY MILEAGE—URBAN, RURAL, AND FEDERAL-AID HIGHWAY SYSTEM: 1986

[As of Dec. 31. For definition of urban, rural, and Federal-aid highway system roads, see text, section 21]

STATE	Urban (1,000)	Rural (1,000)	FEDERAL-AID HIGHWAY SYSTEM ¹				STATE	Urban (1,000)	Rural (1,000)	FEDERAL-AID HIGHWAY SYSTEM ¹						
			Total		Urban	Sec- ondary				Total		Urban	Sec- ondary			
			Primary	Inter- state ²						Primary	Inter- state ²					
U.S.	701.4	3,178.1	303,233	43,844	146,121	397,914	MO	15.0	104.4	7,970	1,160	2,356	18,206			
AL	14.6	73.3	7,572	879	2,745	11,405	MT	2.3	69.4	6,650	1,187	322	4,691			
AK	1.7	11.9	2,132	1,089	235	1,851	NE	4.9	87.3	7,676	481	1,053	11,434			
AZ	10.2	67.1	5,111	1,161	3,091	3,299	NV	3.2	41.2	2,391	545	557	2,315			
AR	7.6	69.4	5,728	542	1,121	7,173	NH	2.4	12.1	1,353	221	722	1,230			
CA	67.4	107.7	13,457	2,389	17,099	11,088	NJ	22.4	11.6	1,868	388	5,347	1,722			
CO	10.9	65.4	5,240	924	2,284	3,411	NM	5.2	48.4	4,555	999	606	3,951			
CT	10.8	8.9	1,611	340	2,958	902	NY	37.2	72.9	9,940	1,496	8,702	6,306			
DE	1.5	3.8	473	41	305	602	NC	18.0	75.6	5,300	797	2,656	10,297			
DC	1.1	-	186	12	233	-	ND	1.7	84.5	6,106	571	463	10,635			
FL	32.0	67.1	9,726	1,329	5,651	4,549	OH	30.9	82.3	8,192	1,560	7,725	11,810			
GA	19.8	86.8	11,302	1,232	3,968	13,996	OK	12.4	98.6	6,293	927	2,978	11,178			
HI	1.4	2.7	548	37	318	450	OR	8.5	86.1	5,779	716	1,983	7,791			
ID	2.4	69.2	3,270	605	725	4,191	PA	29.1	85.6	11,437	1,524	6,983	8,039			
IL	31.1	103.7	11,563	1,793	6,702	12,938	RI	4.4	1.6	466	70	939	197			
IN	17.5	73.9	9,083	1,118	4,530	9,243	SC	9.3	54.0	6,460	789	1,169	8,517			
IA	8.6	103.9	9,624	784	2,412	13,499	SD	1.7	71.7	6,479	678	379	10,993			
KS	8.7	123.9	8,893	620	1,568	22,611	TN	14.5	69.4	7,168	1,057	3,084	5,471			
KY	7.5	62.1	4,520	742	1,851	7,252	TX	73.5	212.5	19,887	3,181	7,574	32,623			
LA	12.2	46.0	3,857	711	2,085	7,351	UT	5.3	44.6	3,501	877	920	2,604			
ME	2.4	19.6	2,323	315	707	2,730	VT	1.0	13.1	1,440	320	281	1,948			
MD	11.7	16.0	2,583	389	2,124	1,894	VA	14.3	61.5	8,413	1,053	3,347	10,206			
MA	20.6	13.2	2,776	562	5,902	2,007	WA	15.4	65.0	5,788	749	3,898	7,205			
MI	26.9	90.7	8,416	1,138	5,410	16,986	WV	3.0	32.2	2,930	478	785	6,360			
MN	14.0	118.7	10,202	889	2,192	16,640	WI	14.1	94.6	9,762	578	2,871	12,409			
MS	7.0	64.8	6,408	686	1,691	11,726	WY	1.8	37.1	3,895	914	511	2,293			

— Represents zero. ¹ Highway mileage open to traffic. ² Although the Interstate system is part of the Federal-aid primary system, its mileage is shown separately.

Source: U.S. Federal Highway Administration, *Highway Statistics*, annual.

NO. 1005. HIGHWAY MILEAGE—PAVEMENT CONDITION FOR URBAN AND RURAL AREAS, BY TYPE OF ROAD SYSTEM: 1980 TO 1986

[Highway pavement condition is classified by the Present Serviceability Rating (PSR) system, which ranges from a high of 5.0 down to 0.1. The reported ranges are defined as: PSR 5.0-3.5, pavements give a first class ride and exhibit few, if any, visible signs of surface wear. Of the quality of new or nearly new pavements. PSR 3.4-2.0, pavements have a riding quality somewhat inferior to that of new pavements or may even be barely tolerable at high speeds. Surfaces may show signs of cracking, substantial patching, and rutting. PSR 1.9-0.1, pavements show extensive wear to the point of needing resurfacing or may even need complete reconstruction.]

PAVEMENT CONDITION	INTERSTATE ROAD SYSTEMS				ARTERIAL ROAD SYSTEMS				COLLECTOR ROAD SYSTEMS			
	1980	1984	1985	1986	1980	1984	1985	1986	1980	1984	1985	1986
URBAN AREAS												
Percent of road mileage rated—												
PSR 0.1-1.9 (0.1-2.4) ¹	6	9	7	7	7	6	5	5	9	8	7	7
PSR 2.0-3.4 (2.5-3.4)	26	36	38	38	42	52	53	51	50	58	58	58
PSR 3.5-5.0	68	55	55	55	51	42	42	44	41	34	35	35
RURAL AREAS												
Percent of road mileage rated—												
PSR 0.1-1.9 (0.1-2.4)	5	8	7	9	6	6	4	4	16	11	10	9
PSR 2.0-3.4 (2.5-3.4)	26	34	33	33	46	50	51	50	55	56	59	58
PSR 3.5-5.0	69	58	60	58	48	44	45	46	29	33	31	33

¹ PSR range shown in parentheses applies to Interstate roads only.

NO. 1006. RECEIPTS AND DISBURSEMENTS FOR HIGHWAYS, BY TYPE: 1970 TO 1988

[In millions of dollars. Data compiled from reports of State and local authorities. For Federal highway trust fund receipts, disbursements, and balances, see table 492. State data include District of Columbia]

TYPE	1970	1975	1980	1985	1986	1987	1988, proj.		
							Total ¹	Federal	State
Total receipts.....	21,747	29,160	39,715	61,506	64,669	65,826	70,615	15,911	34,879
Current income.....	19,661	26,921	37,604	54,957	58,373	61,446	66,065	15,911	32,379
Imposts on highway users ²	15,311	18,578	22,659	35,599	37,334	39,776	42,958	13,854	27,754
Other taxes and fees.....	3,732	6,605	11,808	15,127	16,381	16,939	18,385	895	2,940
Investment Income and other receipts.....	818	1,733	3,237	4,231	4,658	4,731	4,722	1,162	1,685
Bond issue proceeds ³	1,886	2,239	2,111	6,549	6,296	4,380	4,550	2,500	
Intergovernmental payments ⁴	(x)	(x)	(x)	(x)	(x)	(x)	(x)	-14,058	6,787
Funds drawn from (+) or placed in (-) reserves.....	-912	-461	+2,080	-4,058	-2,603	-1,107	-2,968	-814	-951
Total funds available.....	20,835	28,699	41,795	57,448	62,066	64,719	67,647	1,039	40,715
Total disbursements.....	20,835	28,699	41,795	57,448	62,066	64,719	67,647	1,039	40,715
Current disbursements.....	19,583	27,207	40,084	54,725	58,934	61,405	64,299	1,039	38,763
Capital outlay.....	11,575	14,398	20,237	27,138	29,882	29,245	30,601	543	23,059
Maintenance and traffic services.....	4,720	7,286	11,445	16,032	17,355	18,549	19,278	163	7,315
Administration and research.....	1,275	1,981	3,022	4,033	4,583	4,907	5,240	333	3,165
Law enforcement and safety.....	1,303	2,413	3,824	5,334	5,597	6,006	6,403	3,493	
Interest on debt.....	710	1,129	1,456	2,188	2,507	2,698	2,777	-	1,732
Debt retirement ⁵	1,252	1,492	1,711	2,723	3,132	3,314	3,348	-	1,952

¹ Represents zero. X Not applicable. ² Includes other levels of government not shown separately. ³ Excludes amounts later allocated for nonhighway purposes. ⁴ Par value. Excludes issue and redemption of short-term notes or refunding bonds. Premiums and discounts on sale of bonds and accrued interest are included with investment income and other receipts. Redemption premiums and discounts are included with interest on debt. ⁵ Plus sign (+) indicates net receipt of funds from other levels of government; minus sign (-) indicates net disbursement of funds to other levels.

Source of tables 1005 and 1006: U.S. Federal Highway Administration, *Highway Statistics*, annual; and releases.

NO. 1007. DISBURSEMENTS OF STATE HIGHWAY FUNDS, BY STATE: 1980 TO 1986

[In millions of dollars. Comprises disbursements from current revenues or loans for construction, maintenance, interest and principal payments on highway bonds; transfers to local units, and miscellaneous. Includes transactions by State toll authorities. Excludes amounts allocated for collection and nonhighway purposes, and bonds redeemed by refunding. See also *Historical Statistics, Colonial Times to 1970*, series Q 90-94.]

STATE	1980	1985	1986	STATE	1980	1985	1986	STATE	1980	1985	1986
U.S.	30,049	40,891	44,200	KS	440	506	581	ND	143	199	172
AL	517	875	772	KY	913	901	1,004	OH	1,032	1,622	1,593
AK	274	383	394	LA	682	879	1,055	OK	461	668	653
AZ	365	778	1,027	ME	164	238	235	OR	482	492	553
AR	425	488	536	MA	663	988	1,293	PA	1,557	2,340	2,609
CA	1,930	3,006	2,964	MI	704	786	800	RI	72	139	190
CO	411	563	625	MN	997	1,275	1,414	SC	309	420	441
CT	393	565	705	MS	611	980	962	SD	151	211	186
DE	152	234	241	MO	468	845	687	TN	609	800	824
DC	57	142	187	MT	555	854	868	TX	1,882	1,825	2,783
FL	1,261	1,647	1,778	NE	224	286	316	UT	241	394	334
GA	762	1,115	1,108	NV	169	241	256	VT	87	135	161
HI	134	137	140	NH	152	219	203	VA	894	1,165	1,339
ID	153	229	220	NJ	662	1,229	1,517	WA	787	1,040	1,093
IL	1,652	2,087	2,114	NM	197	384	413	WV	672	582	593
IN	688	919	969	NY	1,650	2,022	2,183	WI	468	669	763
IA	504	746	725	NC	807	986	955	WY	192	298	278

Source: U.S. Federal Highway Administration, *Highway Statistics*, annual.

No. 1008. FEDERAL GRANTS TO STATE AND LOCAL GOVERNMENTS FOR HIGHWAY TRUST FUND AND URBAN MASS TRANSPORTATION ADMINISTRATION (UMTA), BY STATE: 1987

[Year ending Sept. 30]

STATE	HIGHWAY TRUST FUND		UMTA		STATE	HIGHWAY TRUST FUND		UMTA		STATE	HIGHWAY TRUST FUND		UMTA	
	Total (mil. dol.)	Per capita ¹	Total (mil. dol.)	Per capita ¹		Total (mil. dol.)	Per capita ¹	Total (mil. dol.)	Per capita ¹		Total (mil. dol.)	Per capita ¹	Total (mil. dol.)	Per capita ¹
U.S.	11,191	\$45.98	3,228	\$13.26	KY	197	52.76	14	3.71	ND	72	107.71	3	3.76
AL	188	46.00	16	3.90	LA	237	53.04	25	5.58	OH	285	26.39	74	6.83
AK	140	266.48	2	4.52	ME	59	50.05	5	4.11	OK	155	47.31	12	3.72
AZ	267	78.93	20	5.78	MD	365	80.59	85	18.79	OR	151	55.35	29	10.74
AR	112	46.81	6	2.45	MA	120	20.43	195	33.24	PA	597	50.01	178	14.90
CA	794	28.69	411	14.87	MI	408	44.34	85	9.23	RI	66	66.97	8	8.43
CO	203	81.61	26	7.91	MN	268	63.03	37	6.64	SC	145	42.38	7	1.99
CT	240	74.66	40	12.31	MS	132	50.34	3	1.22	SD	71	100.44	2	2.12
DE	47	73.14	6	8.86	MO	251	49.14	29	5.77	TN	233	47.80	19	3.98
DC	54	86.55	210	337.49	MT	102	125.78	3	3.19	TX	679	34.51	94	5.60
FL	428	35.63	99	8.24	NE	91	56.98	9	5.58	UT	156	92.73	23	12.65
GA	352	56.55	116	18.58	NV	79	78.13	4	4.44	VT	54	59.20	1	1.78
HI	39	35.64	18	16.68	NH	63	55.37	4	3.91	VA	387	65.51	19	3.23
ID	70	69.75	1	1.38	NJ	248	32.33	240	31.29	WA	325	71.65	90	19.93
IL	421	36.38	253	21.87	NM	95	83.10	4	2.50	WV	187	98.61	6	3.32
IN	232	41.86	50	8.89	NY	648	36.33	578	32.45	WI	147	30.65	36	7.42
IA	162	57.05	11	3.87	NC	211	32.95	16	2.49	WY	82	167.13	1	1.71
KS	180	72.85	6	2.39										

¹ Based on Bureau of the Census estimated resident population as of July 1.Source: U.S. Bureau of the Census, *Federal Expenditures by State for Fiscal Year*, annual.

NO. 1009. STATE GASOLINE TAX RATES, 1986 AND 1987, AND MOTOR FUEL TAX RECEIPTS, 1986

[See also *Historical Statistics, Colonial Times to 1970*, series Q 233-234]

STATE	RATE ¹ (cents per gal.)		Re-c eipts, ² 1986 (mil. dol.)	STATE	RATE ¹ (cents per gal.)		Re-c eipts, ² 1986 (mil. dol.)	STATE	RATE ¹ (cents per gal.)		Re-c eipts, ² 1986 (mil. dol.)
	1986	1987			1986	1987			1986	1987	
Total	20.88	(NA)	(X)	IA	16	16	245	NC	15.5	15.5	489
Federal	39.10	39.10		KS	11	11	154	ND	13	17	49
State	11.78	(NA)	14,833	KY	15	15	239	OH	12	14.7	608
AL	4.13	13	254	LA	16	16	347	OK	10	16	202
AK	8	8	21	ME	14	14	90	OR	11	12	141
AZ	16	16	297	MD	13.5	18.5	311	PA	12	12	920
AR	13.5	13.5	197	MA	11	11	282	RI	15	15	55
CA	9	9	1,227	MI	16	15	656	SC	13	13	255
CO	18	18	245	MN	17	17	348	SD	13	13	52
CT	17	19	238	MS	9	15	138	TN	17	17	386
DE	13	16	42	MO	7	11	215	TX	10	15	1,007
DC	15.5	15.5	25	MT	17	20	81	UT	14	19	115
FL	9.7	9.7	598	NE	17.1	17.9	153	VT	13	13	39
GA	7.5	7.5	293	NV	13	16	80	VA	15	17.5	443
HI	11	11	39	NH	14	14	71	WA	18	18	414
ID	14.5	14.5	79	NJ	8	8	349	WV	10.5	10.5	103
IL	13	13	676	NM	11	14	104	WI	20	20	403
IN	14	14	517	NY	6	8	500	WY	8	8	36

NA Not available. X Not applicable. ¹ In effect Dec. 31. ² Represents net receipts. ³ Federal tax includes 0.1 cent per gallon for the leaking underground storage tank fund effective January 1, 1987. ⁴ Includes 2 cents per gallon inspection fee. ⁵ Trucks or combinations with more than 2 axles pay tax of 2 cents per gallon more in Kentucky, and 3.5 cents per gallon more in Virginia. ⁶.08 cents per gallon is for inspection fee. ⁷ Includes 1 cent per gallon inspection fee.

NO. 1010. PUBLIC HIGHWAY DEBT—STATE AND LOCAL GOVERNMENTS: 1970 TO 1988

[In millions of dollars. Long-term obligations. State data are for calendar years; local data for varying fiscal years. Excludes duplicated and interunit obligations. Municipal debt includes other political subdivisions urban in character. See also *Historical Statistics, Colonial Times to 1970*, series Q 136-147.]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987 ¹	1988 ²
Total debt issued³	1,886	2,239	2,094	2,574	2,915	2,566	3,151	6,074	6,286	4,380	4,550
State	1,305	1,412	1,128	965	1,565	1,072	1,715	9,404	9,946	2,480	2,500
County and township	174	222	276	305	415	475	524	1,987	1,200	600	700
Municipal	407	605	690	1,304	945	1,019	912	1,283	1,150	1,300	1,350
Total debt redeemed⁴	1,252	1,492	1,706	2,464	2,046	2,172	2,411	2,737	3,132	3,314	3,348
State	782	908	1,022	1,579	1,146	1,191	1,507	1,580	1,875	1,950	1,952
County and township	152	168	209	201	225	303	216	378	432	516	526
Municipal	318	418	475	684	675	678	688	776	825	848	870
Total debt outstanding	19,107	23,801	25,851	25,961	26,830	27,224	27,964	31,301	34,465	35,631	36,733
State	13,903	17,422	18,282	17,668	18,077	17,958	18,166	19,990	22,061	22,591	23,139
County and township	1,685	1,822	2,157	2,261	2,451	2,623	2,931	3,940	4,708	4,792	4,968
Municipal	3,519	4,557	5,412	6,032	6,302	6,643	6,867	7,371	7,696	8,148	8,628

¹ Preliminary. ² Projection. ³ Excludes refunding issues. ⁴ Excludes redemptions by refunding.Source of tables 1009 and 1010: U.S. Federal Highway Administration, *Highway Statistics*, annual.

NO. 1011. MOTOR VEHICLES—SUMMARY: 1970 TO 1987

ITEM	Unit	1970	1975	1980	1982	1983	1984	1985	1986	1987
PASSENGER CARS										
Passenger car production	1,000	6,550	6,717	6,376	5,073	6,781	7,773	8,185	7,829	7,098
Passenger car factory sales	1,000	6,547	6,713	6,400	5,049	6,739	7,621	8,002	7,516	7,085
Passenger car (new), retail sales ¹	1,000	8,405	8,640	8,979	7,982	9,182	10,390	11,042	11,460	10,278
Domestic ²	1,000	7,116	7,050	6,581	5,759	6,795	7,952	8,205	8,215	7,081
Subcompact ³	1,000	700	1,604	1,489	1,776	2,232	1,297	1,395	1,101	
Compact ³	1,000	1,338	2,338	1,659	1,257	1,110	1,356	2,583	2,461	2,388
Standard ³	1,000	1,986	1,358	1,377	1,825	1,617	1,682	1,888	1,565	
Intermediate ³	1,000	5,778	2,058	1,957	1,641	2,071	2,484	2,464	2,540	2,028
Imports ⁴	1,000	1,285	1,557	2,398	2,223	2,387	2,439	2,838	3,245	3,197
TRUCKS										
Truck and bus production	1,000	1,734	2,270	1,634	1,912	2,444	3,151	3,468	3,490	3,811
Truck and bus factory sales	1,000	1,692	2,272	1,687	1,906	2,414	3,075	3,357	3,393	3,821
Truck and bus retail sales ⁵	1,000	1,746	2,351	2,232	2,248	2,709	3,528	3,984	4,031	4,174
Light duty (up to 14,000 GVW) ⁶	1,000	(NA)	2,078	1,964	2,064	2,521	3,261	3,700	3,765	3,885
Med. duty (14,001-26,000 GVW) ⁶	1,000	(NA)	169	92	46	48	61	53	51	55
Heavy duty (over 26,000 GVW) ⁶	1,000	126	106	176	138	141	216	231	214	234
MOTORCYCLES										
Motorcycle registrations, new ⁷	1,000	751	747	838	688	811	772	722	631	550
Motorcycle (new) retail sales ⁸	1,000	1,010	940	1,070	990	1,185	1,305	1,260	1,045	935
All-terrain vehicles	1,000	(NA)	(NA)	(NA)	250	425	550	550	465	395
All-terrain vehicle imports	1,000	(NA)	(NA)	(NA)	275	430	635	683	498	320
Motorcycle imports, total ⁹	1,000	1,091	948	1,120	917	540	441	733	550	318
Value ¹⁰	Mil. dol.	308	713	1,142	1,110	697	523	783	763	463
FOREIGN TRADE										
Passenger cars (new), exported ¹¹	1,000	285	640	617	379	554	818	704	673	633
Passenger cars (new), imported ¹¹	1,000	2,013	2,075	3,116	2,826	3,134	3,559	4,398	4,691	4,589
Canada	1,000	693	734	595	703	836	1,073	1,145	1,162	927
Germany, Federal Republic of	1,000	675	370	339	259	240	336	473	452	378
Japan	1,000	381	696	1,992	1,801	1,871	1,948	2,527	2,618	2,418
Trucks (new) exports	1,000	91	219	186	124	132	159	183	205	222
Trucks (new) imports ¹²	1,000	166	295	747	697	785	1,028	1,253	1,351	1,177
Japan	1,000	27	142	483	356	430	567	800	876	772
Import value, new passenger cars ¹³	Mil. dol.	3,719	7,483	16,675	20,180	23,994	29,264	36,474	45,302	47,858
Trucks and buses, new ¹³	Mil. dol.	381	620	1,985	4,453	4,848	6,541	7,734	8,504	8,728
Export value ¹³	Mil. dol.	3,871	10,658	16,015	16,039	17,078	20,775	22,820	21,955	24,812
Passenger cars (new) ¹³	Mil. dol.	822	2,852	3,932	2,867	4,208	4,876	6,027	6,258	6,695
Trucks and buses (new) ¹³	Mil. dol.	636	2,305	2,977	2,642	2,130	2,479	2,789	2,953	3,375
Parts and accessories ¹⁴	Mil. dol.	2,413	5,501	9,106	10,530	10,740	13,421	14,004	12,744	14,742
VEHICLES IN USE AND RETIRED										
Cars in use, total	Million	80.4	95.2	104.6	106.9	109.0	112.0	114.7	117.3	119.8
Under 3 years	Million	24.4	25.8	26.8	21.5	20.7	22.0	24.8	27.9	28.1
3-5 years	Million	24.9	27.0	25.5	28.9	28.8	26.3	23.9	22.7	24.7
6-8 years	Million	18.4	22.0	25.2	22.2	23.5	26.8	27.8	26.5	24.4
9-11 years	Million	7.7	13.9	14.6	17.9	18.9	17.4	18.7	21.2	21.4
12 years and over	Million	4.9	6.6	12.5	15.4	17.0	19.0	21.0	21.5	21.2
Average age	Years	5.6	6.0	6.6	7.2	7.4	7.5	7.6	7.6	7.6
Cars retired from use ¹⁵	1,000	7,461	5,659	8,405	6,921	6,243	6,675	7,729	8,442	8,103
Trucks in use, total	Million	17.7	24.8	35.2	37.0	38.1	40.1	42.4	44.8	47.3
Under 3 years	Million	4.7	6.8	8.8	5.6	5.9	7.2	9.0	11.1	11.9
3-5 years	Million	4.3	5.8	8.1	10.7	9.5	8.0	6.3	6.6	8.3
6-8 years	Million	3.0	4.4	7.4	7.1	7.7	9.2	10.2	8.9	7.4
9-11 years	Million	1.8	3.2	4.4	5.7	6.5	6.2	6.2	8.7	8.0
12 years and over	Million	3.9	4.4	6.5	7.9	8.5	8.2	8.1	8.0	8.0
Average age	Years	7.3	6.9	7.1	7.8	8.1	8.2	8.1	8.0	8.0
Trucks retired from use ¹⁵	1,000	837	908	1,732	1,459	1,491	1,602	2,100	2,309	2,364
TIRES AND BATTERIES SHIPMENTS										
Tires, passenger car, total ¹⁶	Million	168.6	167.0	145.9	167.5	182.0	201.6	200.9	202.7	210.8
Radials	Million	2.9	61.5	83.5	115.9	133.4	156.6	164.7	174.0	187.3
Replacement	Million	129.6	122.5	106.9	130.5	134.0	144.6	141.5	144.3	151.9
Tires, truck and bus, total ¹⁶	Million	25.7	27.3	31.1	33.8	36.9	40.8	41.1	40.6	44.4
Radials	Million	8	3.8	10.4	13.4	16.0	19.7	21.1	26.0	
Replacement	Million	16.7	19.8	24.4	28.1	30.3	31.7	32.1	32.4	34.5
Batteries, total ¹⁷	Million	46.9	52.9	81.7	64.6	69.0	74.7	74.4	75.7	75.7
Replacement automobile batteries	Million	37.9	42.8	50.1	54.2	56.1	59.3	58.7	60.3	59.9

NA Not available. ¹ Based on data from U.S. Dept. of Commerce. ² Includes domestic models produced in Canada and Mexico. ³ Source: Board of Governors of the Federal Reserve System, unpublished data. Represents total auto sales data from *Ward's Automotive Reports*. Criteria by which each year's car models are grouped into the major size categories vary among those collecting data. Data shown here follow *Automotive News* classifications. Beginning 1980, cars produced in U.S. by foreign manufacturers are included. ⁴ Excludes domestic models produced in Canada. ⁵ Excludes motorcoaches and light-duty imports from foreign manufacturers. Beginning 1975, includes imports sold by franchised dealers of U.S. manufacturers. Starting in 1986, includes sales of trucks over 10,000 lbs. GVW by foreign manufacturers. ⁶ Gross vehicle weight (fully loaded vehicle).

⁷ Source: R. L. Polk & Company, Detroit, MI, *New Motorcycle Registrations by States*, 1970-1986 excludes Oklahoma; 1984, excludes New York. Reproduction prohibited without Polk permission. ⁸ Estimates by Motorcycle Industry Council Inc., Costa Mesa, CA. Includes all-terrain vehicles and scooters. Excludes mopeds/motorized bicycles. ⁹ Source: Motorcycle Industry Council, Inc., Costa Mesa, CA. Data from U.S. Dept. of Commerce. Excludes mopeds/motorized bicycles and all-terrain vehicles.

¹⁰ Dutiable value for customs purposes prior to 1980 thereafter, c.i.f. value. ¹¹ 1970-1975, covers assembled units only. Beginning 1980, includes chassis. ¹² Includes other countries, not shown separately. ¹³ Covers assembled and unassembled vehicles.

¹⁴ Includes rubber tires and tubes and used vehicles. ¹⁵ For years ending June 30. Represents vehicles failing to re-register. ¹⁶ Includes original equipment. Also includes exports, not shown separately. Source: The Rubber Manufacturers Association, Inc., Washington, D.C., *RMA Monthly Tire Report*. ¹⁷ Source: Battery Council International, Chicago, IL.

Source: Except as noted, Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, MI, *Motor Vehicle Facts and Figures*, annual; and *World Motor Vehicle Data*, annual.

Motor-Vehicle Registrations, Motorcycles, Miles of Travel

595

No. 1012. MOTOR-VEHICLE REGISTRATIONS, 1970 TO 1987, AND VEHICLE-MILES OF TRAVEL, 1986, BY STATE

In thousands, except as indicated. Motor vehicle registrations cover publicly, privately, and commercially owned vehicles. For uniformity, figures have been adjusted to a calendar-year basis as registration years in States differ; figures represent net numbers where possible, excluding re-registrations and nonresident registrations]

STATE	AUTOMOBILES, TRUCKS, AND BUSES ¹					MOTORCYCLES ¹ (incl. official) 1987, est.		1986				
	1970	1980	1985	1986	Total			Total	Per 1,000 population ²			
					1987, est.	Automobiles (incl. taxis)	Total	Per 1,000 population ²	Total (bill. mi.)			
U.S.	108,418	155,796	171,654	176,191	180,989	139,041	571	5,148	21	3,879.5	1,838.2	473.8
AL	1,956	2,938	3,338	3,457	3,470	2,534	621	56	14	88.0	34.0	386.4
AK	139	262	353	363	371	233	444	10	19	13.6	4.0	294.1
AZ	1,093	1,917	2,235	2,346	2,440	1,698	501	80	24	77.3	22.7	293.7
AR	1,043	1,574	1,384	1,428	1,459	952	399	20	8	77.1	17.6	228.3
CA	11,901	16,873	18,899	19,760	20,608	15,978	578	684	25	175.1	214.9	1,227.3
CO	1,442	2,342	2,759	2,783	2,789	2,016	612	107	32	76.3	26.4	345.0
CT	1,733	2,147	2,465	2,582	2,658	2,495	777	57	18	19.7	24.1	1,223.4
DE	312	397	465	480	492	386	599	9	14	5.3	5.8	1,094.3
DC	257	268	326	289	295	278	447	3	5	1.1	3.3	3,000.0
FL	4,120	7,614	9,865	10,382	10,043	8,752	729	227	19	99.1	87.3	680.9
GA	2,584	3,818	4,580	4,841	5,106	3,659	588	125	20	106.6	55.8	532.8
HI	405	570	651	689	735	640	591	16	15	4.0	7.0	1,760.0
ID	488	834	854	857	858	536	537	47	47	71.5	7.8	109.1
IL	5,238	7,477	7,727	7,420	7,409	6,084	525	214	18	134.8	74.1	549.7
IN	2,818	3,826	4,024	4,174	4,325	3,241	586	117	21	91.5	40.8	445.9
IA	1,790	2,329	2,696	2,638	2,623	1,690	667	227	80	112.5	20.4	181.3
KS	1,548	2,007	2,148	2,176	2,203	1,518	613	86	35	132.6	19.8	149.3
KY	1,763	2,593	2,615	2,685	2,745	1,638	493	43	12	69.8	29.3	421.0
LA	1,742	2,779	3,012	2,890	2,831	1,868	419	48	11	58.2	29.9	513.7
ME	510	724	840	872	916	694	585	43	36	22.0	10.0	454.5
MD	1,872	2,803	3,276	3,361	3,451	2,830	624	84	19	27.7	35.2	1,270.8
MA	2,575	3,749	3,738	3,841	3,927	3,430	586	114	19	33.8	40.7	1,204.1
MI	4,569	6,488	6,727	6,832	6,939	5,493	597	247	27	117.7	72.0	611.7
MN	2,207	3,091	3,385	3,087	3,107	2,400	565	132	31	132.6	33.8	264.9
MS	1,117	1,577	1,746	1,770	1,798	1,374	523	23	9	71.8	19.2	267.4
MO	2,408	3,271	3,558	3,683	3,790	2,741	537	74	15	119.4	41.6	348.4
MT	485	680	652	673	693	468	578	26	32	71.7	7.7	107.4
NE	974	1,254	1,257	1,281	1,306	871	546	27	17	92.2	12.6	136.7
NV	355	655	709	769	812	581	577	19	19	44.4	8.0	180.2
NH	390	704	974	1,071	1,164	972	920	67	63	14.5	7.9	544.6
NJ	3,586	4,761	4,909	5,267	5,373	4,870	635	118	15	34.0	55.4	1,629.4
NM	637	1,068	1,176	1,320	1,407	894	586	47	31	53.6	13.2	246.3
NY	6,718	8,002	9,042	9,515	9,996	8,754	491	236	13	110.1	94.7	860.1
NC	2,826	4,532	4,450	4,739	4,934	3,585	559	61	10	93.8	52.9	565.2
ND	428	627	655	648	641	379	564	26	39	86.2	5.6	65.0
OH	5,974	7,771	8,102	8,159	8,204	6,730	624	303	28	113.3	81.3	717.6
OK	1,713	2,583	2,864	2,902	2,934	1,893	579	67	20	111.0	30.8	277.5
OR	1,369	2,081	2,204	2,264	2,335	1,708	627	82	30	94.6	22.7	240.0
PA	5,818	6,926	7,203	7,477	7,724	5,267	525	196	16	115.7	77.6	670.7
RI	488	623	610	632	652	544	552	25	25	6.0	5.4	900.0
SC	1,360	1,996	2,222	2,304	2,369	1,782	520	32	9	63.3	28.3	447.1
SD	426	601	650	664	678	412	581	34	48	73.5	6.2	84.4
TN	2,050	3,271	3,764	3,932	4,155	3,298	679	123	25	83.9	39.5	470.8
TX	6,693	10,475	12,444	12,407	12,421	8,495	506	240	14	286.0	148.3	518.5
UT	664	992	1,099	1,111	1,125	760	452	46	27	49.9	12.1	242.5
VT	229	347	398	418	439	326	595	20	36	14.0	4.8	342.9
VA	2,263	3,626	4,253	4,532	4,718	3,711	629	76	13	65.8	51.7	785.7
WA	2,102	3,225	3,526	3,752	3,906	2,718	599	144	32	80.5	36.0	447.2
WV	801	1,320	1,143	1,170	1,195	826	435	32	17	35.1	13.2	376.1
WI	2,182	2,941	3,187	3,120	3,121	2,402	500	185	38	108.7	38.4	353.3
WY	247	467	500	440	417	237	484	23	47	38.9	5.4	138.8

¹ Excludes vehicles owned by military services. ² Based on resident population as of July 1.

Source: U.S. Federal Highway Administration, *Highway Statistics*, annual; and *Selected Highway Statistics and Charts*, annual.

Transportation—Land

NO. 1013. MOTOR VEHICLES—REGISTRATIONS, FACTORY SALES, AND RETAIL SALES: 1955 TO 1987

[Minus sign (–) indicates decrease. For definition of average annual percent change, see Guide to Tabular Presentation. See also *Historical Statistics, Colonial Times to 1970*, series Q 148-155]

YEAR	REGISTRATIONS ¹ (mil.)			Motor- cycle registrations ¹ (1,000)	FACTORY SALES (1,000)			PASSENGER CARS RETAIL SALES (1,000)			AVERAGE ANNUAL PERCENT CHANGE ⁴	
	Total cars, trucks, buses	Pas- enger cars ²	Trucks and buses		Total cars, trucks, buses	Pas- enger cars	Trucks and buses ³	Total	Do- mestic	Im- ports	Registrations ⁵	Retail sales
1955.....	62.7	52.1	10.6	412	9,169	7,920	1,249	7,466	7,408	58	7.2	(NA)
1960.....	73.9	61.7	12.2	574	7,869	6,675	1,194	6,641	6,142	499	3.6	-2.3
1965.....	90.4	75.3	15.1	1,382	11,057	9,306	1,752	9,332	8,763	569	4.7	7.0
1967.....	96.9	80.4	16.5	1,953	8,976	7,437	1,539	8,937	7,568	769	3.1	-5.5
1968.....	100.9	83.6	17.3	2,089	10,718	8,822	1,896	9,656	8,625	1,031	4.1	15.8
1969.....	105.1	86.9	18.2	2,316	10,147	8,224	1,923	9,583	8,464	1,118	4.2	-8
1970.....	108.4	89.2	19.2	2,824	8,239	6,547	1,692	8,403	7,119	1,285	3.2	-12.3
1971.....	113.0	92.7	20.3	3,344	10,638	8,585	2,053	10,250	8,681	1,568	4.2	22.0
1972.....	118.8	97.1	21.7	3,760	11,271	8,824	2,447	10,950	9,327	1,623	5.1	6.8
1973.....	125.7	102.0	23.7	4,371	12,637	9,658	2,980	11,439	9,676	1,763	5.8	4.5
1974.....	129.3	104.8	25.1	4,856	10,058	7,331	2,727	8,867	7,454	1,413	3.4	-22.5
1975.....	132.9	108.7	26.2	4,964	8,985	6,713	2,272	8,640	7,053	1,587	2.3	-2.6
1976.....	138.5	110.2	28.4	4,933	11,480	8,500	2,879	10,110	8,611	1,498	4.2	17.0
1977.....	142.1	112.3	29.8	4,881	12,642	9,201	3,441	11,185	9,109	2,076	2.6	10.5
1978.....	148.4	116.6	31.8	4,868	12,871	9,165	3,708	11,312	9,312	2,000	4.4	1.1
1979.....	151.9	118.5	33.4	5,422	11,456	8,419	3,037	10,671	8,341	2,329	2.4	-5.7
1980.....	155.8	121.6	34.2	5,694	8,067	6,400	1,667	6,979	6,581	2,398	2.6	-15.9
1981.....	158.3	123.1	35.2	5,831	7,956	6,255	1,701	8,536	6,209	2,327	1.6	-4.9
1982.....	159.6	123.7	35.9	5,754	6,955	5,049	1,908	7,982	5,759	2,223	.8	-6.5
1983.....	163.9	126.2	37.7	5,585	9,153	6,739	2,414	9,182	6,795	2,387	2.7	15.0
1984.....	165.2	128.1	38.1	5,480	10,696	7,621	3,075	10,391	7,952	2,439	1.6	13.2
1985.....	171.7	131.9	39.8	5,444	11,350	8,002	3,357	11,042	8,204	2,838	3.3	6.3
1986.....	176.2	135.4	40.8	5,262	10,908	7,516	3,393	11,460	8,215	3,245	2.6	3.8
1987 ⁶	181.0	139.0	41.9	5,148	10,907	7,085	3,821	10,278	7,081	3,197	2.7	-10.3

NA Not available. ¹ Excludes Alaska and Hawaii prior to 1960. Includes publicly owned vehicles. Excludes military services' vehicles. ² Includes taxis. ³ Includes standard equipment. ⁴ From immediate prior year. ⁵ Excludes motorcycles.

⁶ Estimate.

Source: Registrations—U.S. Federal Highway Administration, *Selected Highway Statistics and Charts*, annual; sales—Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, MI, *MVMA Motor Vehicle Facts and Figures*, annual.

NO. 1014. MOTOR VEHICLE OUTPUT AND TRADE IN NATIONAL INCOME ACCOUNTS: 1970 TO 1987

[In billions of dollars, except percent. Vehicle output equals final dollar sales value of new vehicles, plus net dollar value of used vehicle sales, adjusted for changes in inventories and net balance of vehicle exports and imports]

YEAR	CURRENT DOLLARS						CONSTANT (1982) DOLLARS					
	GNP ¹	Vehicle output			Vehicle			GNP ¹	Vehicle output			Vehicle
		Total	Percent of GNP	Auto	Truck	Ex- port value	Im- port value		Total	Percent of GNP	Auto	Truck
1970.....	1,016	36.8	3.6	28.5	8.3	1.4	4.4	2,416	73.2	3.0	53.1	20.1
1971.....	1,103	49.3	4.5	38.9	10.4	1.8	5.9	2,485	93.6	3.8	69.8	23.8
1972.....	1,213	55.0	4.5	41.4	13.6	2.0	6.8	2,609	104.2	4.0	73.9	30.3
1973.....	1,359	63.1	4.6	46.0	17.1	2.7	7.8	2,744	119.4	4.4	82.0	37.4
1974.....	1,473	57.7	3.8	38.8	18.9	3.7	8.8	2,729	103.7	3.8	65.4	38.3
1975.....	1,598	56.7	3.5	40.3	18.4	5.1	8.4	2,695	90.9	3.4	61.8	29.1
1976.....	1,783	78.3	4.4	55.2	23.1	5.4	11.0	2,827	118.0	4.2	80.1	37.9
1977.....	1,991	95.1	4.8	64.3	30.8	5.6	13.3	2,959	135.7	4.6	88.7	47.0
1978.....	2,250	105.1	4.7	68.3	36.8	6.5	17.4	3,115	138.6	4.4	87.3	51.3
1979.....	2,508	104.0	4.1	65.9	37.1	8.0	18.6	3,192	128.1	4.0	80.2	47.9
1980.....	2,792	84.4	3.1	60.1	24.3	7.1	20.9	3,187	95.2	3.0	67.1	28.1
1981.....	3,053	96.6	3.2	65.4	27.2	7.2	22.6	3,249	102.1	3.1	73.3	28.8
1982.....	3,166	94.3	3.0	66.5	27.8	5.4	25.5	3,166	94.3	3.0	66.5	27.8
1983.....	3,406	123.6	3.6	88.8	35.0	6.2	29.5	3,279	119.8	3.7	85.9	33.9
1984.....	3,772	156.3	4.1	105.1	51.2	7.3	38.9	3,501	146.2	4.2	98.5	47.7
1985.....	4,015	172.8	4.3	116.5	56.3	8.8	45.5	3,619	157.4	4.3	106.5	50.9
1986.....	4,240	175.8	4.1	120.6	55.2	9.3	58.2	3,847	154.0	4.1	106.2	47.8
1987.....	4,527	175.9	3.9	118.3	59.6	9.9	58.2	3,847	151.4	3.9	100.6	50.8

¹ For definition of gross national product (GNP), see text, section 14.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

No. 1015. NEW TRUCKS—RETAIL SALES, BY WEIGHT CLASS AND TYPE: 1980 TO 1987

WEIGHT CLASS AND TYPE	NUMBER (1,000)						PERCENT CHANGE			
	1980	1983	1984	1985	1986	1987	1983-1984	1984-1985	1985-1986	1986-1987
Total	2,232	2,709	3,538	3,984	4,031	4,174	30.6	12.6	1.2	3.5
Under 6,000 pounds										
Utility	985	1,314	2,031	2,408	2,541	2,696	54.6	18.6	5.5	6.1
Pickup, cartype	51	254	370	429	382	383	45.7	15.9	-10.8	.2
Pickup, conventional	50	26	26	24	24	15	-1.8	-5.0	-1.5	-35.8
Pickup, compact	545	445	632	644	582	566	42.0	1.9	-9.7	-2.8
Domestic Import	254	488	613	696	757	861	25.6	13.4	8.9	13.7
Van	229	433	560	625	679	679	29.4	11.6	8.5	17.2
Mini van	78	55	53	70	79	66	-4.1	32.9	-11.9	-16.7
Station wagon (truck chassis)	(X)	(2)	24	103	112	101	80.4	-5.3	-2.2	-9.9
Mini passenger carrier	(X)	8	62	86	98	108	634.1	38.9	14.1	11.1
6,000 to 10,000 pounds										
Utility	975	1,207	1,224	1,280	1,214	1,175	1.5	4.6	-5.2	-3.2
Pickup, conventional	108	84	103	108	101	91	22.2	4.4	-6.4	-9.6
Station wagon (truck chassis)	172	311	265	261	261	254	-14.8	-1.5	.1	-2.8
10,001 pounds and over										
Total	271	189	283	295	276	302	49.9	4.2	-6.4	9.6

X Not applicable. Z Less than 500.

Source: Motor Vehicle Manufacturers Association, *Motor Vehicle Facts and Figures*, annual.

No. 1016. RECREATIONAL VEHICLES—NUMBER AND RETAIL VALUE OF SHIPMENTS: 1970 TO 1987

YEAR	NUMBER (1,000)					RETAIL VALUE (mil. dol.)				
	Total	Motorized homes	Travel trailers	Folding camping trailers	Truck campers	Total	Motorized homes	Travel trailers	Folding camping trailers	Truck campers
1970	380.3	30.3	138.0	116.1	95.9	1,122	318	445	175	183
1973	528.8	129.0	212.3	97.7	89.8	2,322	1,153	843	160	167
1974	295.8	68.9	126.3	55.2	45.4	1,392	624	567	109	92
1975	339.6	96.6	150.6	48.1	44.3	2,320	1,251	856	101	112
1976	541.1	256.1	189.7	53.3	42.0	4,284	2,923	1,132	117	112
1977	533.9	280.2	167.9	53.9	31.9	5,327	3,876	1,229	123	99
1978	526.3	293.6	159.8	48.2	24.7	5,683	4,329	1,153	116	85
1979	307.7	172.6	90.2	31.1	13.8	3,538	2,682	725	83	48
1980	181.4	99.9	52.0	24.5	5.0	1,952	1,381	485	69	17
1981	239.1	135.2	63.8	35.0	5.1	2,775	2,019	631	105	20
1982	258.0	152.5	65.5	34.3	5.7	3,505	2,701	666	110	28
1983	358.0	223.7	90.0	37.5	6.8	6,324	5,099	1,067	122	36
1984	398.2	257.3	92.4	40.9	7.6	7,610	6,262	1,157	145	45
1985	359.2	233.5	82.9	35.9	5.9	7,029	5,724	1,122	137	45
1986	379.5	249.6	86.0	36.5	7.4	7,564	6,155	1,213	144	53
1987	400.2	255.7	92.8	41.6	10.1	8,400	6,826	1,331	167	76

Source: Recreation Vehicle Industry Association, Reston, VA, *RVs... The Family Camping Vehicle, A Year-End Report/1986*. Data also in Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, MI, *Motor Vehicle Facts and Figures*, annual.

No. 1017. MOTORCYCLES—TRAVEL, REGISTRATION, AND FUEL CONSUMPTION: 1970 TO 1986

YEAR	Travel (mil. veh.-miles)	Number of registered vehicles (1,000)	Average travel per vehicle (miles)	FUEL CONSUMPTION		Average miles per gallon consumed
				Total (mil. gal.)	Average per vehicle (gal.)	
1970	2,979	2,824	1,055	59.6	21	50
1975	5,625	4,964	1,134	112.6	23	50
1977	6,349	4,933	1,287	127.0	25	50
1978	7,158	4,888	1,470	149.2	29	50
1979	8,637	5,422	1,593	172.7	32	50
1980	10,214	5,694	1,794	204.3	36	50
1981	10,690	5,831	1,833	213.8	37	50
1982	9,910	5,754	1,722	198.2	34	50
1983	8,760	5,585	1,568	175.2	31	50
1984	8,784	5,480	1,603	175.7	32	50
1985	9,086	5,444	1,659	181.7	33	50
1986	9,414	5,282	1,789	188.3	36	50

Source: U.S. Federal Highway Administration, *Highway Statistics Summary to 1985* and *Highway Statistics*, annual.

Transportation—Land

NO. 1018. MOTOR VEHICLE ACCIDENTS—NUMBER AND DEATHS: 1970 TO 1987

[See also *Historical Statistics, Colonial Times to 1970*, series Q 208 and Q 224-232]

ITEM	UNIT	1970	1972 1	1975	1980	1982	1983	1984	1985	1986	1987
Motor vehicle accidents 2	Million	16.0	17.0	16.5	17.9	18.1	18.3	18.8	19.3	17.7	(NA)
Cars	Million	23.5	24.5	22.5	22.8	23.2	23.5	25.2	25.6	27.7	(NA)
Trucks	Million	3.2	3.5	3.8	5.5	5.8	5.8	6.3	6.1	6.1	(NA)
Motorcycles	1,000	305	343	372	560	550	530	570	480	440	(NA)
Motor vehicle deaths within 1 yr. ³	1,000	54.6	56.3	45.9	53.2	45.8	44.4	46.2	45.9	48.3	48.8
Noncollision accidents	1,000	15.4	15.8	12.7	14.7	12.6	12.2	12.6	12.9	13.9	13.5
Collision accidents:											
With other motor vehicles	1,000	23.2	23.9	19.5	23.0	19.8	19.2	20.3	19.9	20.5	20.8
With pedestrians	1,000	9.9	10.3	8.4	9.7	8.4	8.2	8.6	8.4	8.3	8.6
With fixed objects	1,000	3.8	3.9	3.1	3.7	3.2	3.1	3.0	2.7	3.3	3.8
Deaths within 30 days	1,000	52.6	54.6	44.5	51.1	43.9	42.6	44.3	43.8	46.1	48.4
Vehicle occupants:											
Pedestrians	1,000	40.6	41.4	32.8	36.8	31.2	30.6	31.9	31.5	33.7	34.5
Motorcyclists	1,000	9.0	9.2	7.5	8.1	7.3	6.8	7.0	6.8	6.8	6.7
Bicyclists	1,000	2.3	3.0	3.2	5.1	4.5	4.3	4.6	4.6	4.8	4.0
Traffic death rates: ⁴											
Per 100,000 resident population	Rate	25.8	26.2	20.7	22.6	19.0	18.2	18.7	18.4	19.1	19.1
Per 100,000 registered vehicles	Rate	47.3	44.5	32.3	31.6	26.6	25.1	25.7	24.8	25.4	24.9
Per 100 million vehicle miles	Rate	4.7	4.3	3.4	3.3	2.8	2.6	2.6	2.5	2.5	2.4
Per 100,000 licensed drivers	Rate	47.2	46.1	34.3	35.2	29.2	27.6	28.5	27.9	28.9	28.6
Motor vehicle accidents ⁵	Million	22.1	24.9	24.9	24.1	28.5	29.4	30.8	32.5	33.3	33.9
Injuries ⁶	1,000	4,983	5,190	4,978	5,230	4,490	4,665	4,850	5,044	5,300	5,400
Economic loss ⁷	Bil. dol.	23.5	28.7	36.1	57.1	60.2	62.7	69.0	76.0	80.0	85.0

NA Not available.

¹ Represents peak year for deaths from motor vehicle accidents. ² Covers only accidents occurring on the road.³ Deaths that occur within one year of accident. Includes collision categories not shown separately. ⁴ Within 30 days of accident. Source: U.S. National Highway Traffic Safety Administration, unpublished data from Fatal Accident Reporting System.⁵ Includes motor scooters and motorized bicycles (mopeds).⁶ Based on 30-day definition of traffic deaths.⁷ Source: Insurance Information Institute, New York, NY, *Insurance Facts*. Estimates based on official reports from a representative cross-section of States. Includes all motor vehicle accidents on and off the road and all injuries regardless of length of disability. 1986 data for economic loss based on information from the National Center for Health Statistics, National Health Survey.⁸ Wage loss; legal, medical, hospital, and funeral expenses; insurance administrative costs; and property damage.Source: Except as noted, National Safety Council, Chicago, IL, *Accident Facts*, annual. (Copyright.)

NO. 1019. DEATHS FROM MOTOR VEHICLE ACCIDENTS, BY STATE: 1970 TO 1986

[Data differ from table 1018 because data are based on date of death, not date of accident. Data reflect State where death occurred. Includes deaths of nonresidents of U.S. Beginning 1980, deaths classified according to the ninth revision of the International Classification of Diseases, for earlier years classified according to the revision in use at the time; see text, section 2. Data based on Vital Registration System, see Appendix III. For composition of regions, see fig. I, inside front cover.]

REGION, DIVISION, AND STATE	1970	1972 1	1975	1980	1985	1986	DIVISION AND STATE	1970	1972 1	1975	1980	1985	1986
U.S.	54,845	56,528	46,032	53,476	46,159	48,140	S.A.	9,796	10,600	8,358	9,767	9,389	9,985
Region:							DE.	158	130	129	164	119	160
Northeast	8,850	8,992	7,431	8,255	6,797	7,090	MD.	809	852	886	822	766	756
Midwest	14,629	14,670	11,293	12,244	9,760	10,115	DC.	140	100	91	79	86	86
South	20,792	21,984	18,029	21,014	19,253	20,189	VA.	1,251	1,256	1,089	1,111	1,021	1,141
West	10,574	10,802	9,279	11,983	10,352	10,746	WV.	561	578	499	583	481	470
N.E.	2,095	2,180	1,953	2,246	1,873	1,880	NC.	1,801	2,026	1,560	1,588	1,553	1,727
ME.	288	252	235	264	224	218	SC.	1,070	1,148	837	895	943	1,077
NH.	182	172	155	192	198	181	GA.	1,825	1,940	1,420	1,588	1,482	1,604
VT.	116	126	124	131	117	105	FL.	2,181	2,570	2,067	2,967	2,968	2,925
MA.	918	1,042	895	933	761	773	E.S.C.	4,850	4,972	3,881	3,995	3,664	4,168
RI.	143	144	140	142	124	155	KY.	1,081	1,114	885	865	749	829
CT.	448	444	404	584	449	448	TN.	1,525	1,526	1,280	1,280	1,219	1,372
M.A.	6,755	6,812	5,478	6,009	4,924	5,210	AL.	1,297	1,356	1,087	1,054	1,005	1,180
NY.	3,117	3,140	2,377	2,717	2,121	2,183	MS.	947	976	629	796	691	785
N.J.	1,289	1,352	1,099	1,130	986	1,059	W.S.C.	6,146	6,392	5,790	7,252	6,197	6,037
PA.	2,348	2,320	2,102	2,162	1,817	1,968	AR.	595	750	577	607	580	624
E.N.C.	9,623	9,514	7,361	8,000	6,802	6,764	LA.	1,194	1,336	993	1,261	1,011	987
OH.	2,488	2,336	1,852	1,976	1,581	1,809	MT.	340	408	294	339	233	240
IN.	1,587	1,571	1,139	1,213	1,045	1,077	ID.	320	324	291	345	268	273
IL.	2,267	2,216	1,816	1,985	1,594	1,633	WY.	210	198	210	246	145	163
MI.	2,172	2,238	1,811	1,817	1,605	1,666	CO.	697	746	621	783	628	657
WI.	1,109	1,148	943	1,009	777	769	NM.	568	588	556	617	581	538
W.N.C.	5,006	5,166	3,932	4,244	3,158	3,361	AZ.	782	858	713	883	942	1,073
MN.	1,028	1,062	798	900	857	608	UT.	354	354	285	370	335	370
IA.	946	904	714	662	478	446	NV.	278	290	236	388	297	274
MO.	1,479	1,500	1,105	1,239	1,005	1,205	Pac.	7,025	7,138	6,073	7,892	6,843	7,157
ND.	194	206	183	184	117	120	WA.	902	856	804	1,048	786	763
SD.	240	312	216	238	142	152	OR.	739	774	582	698	605	649
NE.	435	504	385	406	259	311	CA.	5,114	5,300	4,414	5,860	5,294	5,523
KS.	684	878	531	615	500	519	AK.	107	64	120	91	124	98
							HI.	163	164	153	195	134	124

¹ Represents peak year for deaths from motor vehicle accidents.Source: U.S. National Center for Health Statistics, *Vital Statistics of the United States*, annual; and unpublished data.

Motor-Vehicle Accidents and Fatalities

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NO. 1020. FATAL MOTOR-VEHICLE ACCIDENTS—NUMBER OF ACCIDENTS AND FATALITIES, BY TYPE OF VEHICLE: 1980 TO 1986

[Based on data from the Fatal Accident Reporting System]

TYPE OF VEHICLE	ACCIDENTS ¹						OCCUPANT FATALITIES					
	1980	1982	1983	1984	1985	1986	1980	1982	1983	1984	1985	1986
Total ²	45,284	39,092	37,976	39,631	39,195	41,090	41,927	35,646	34,843	36,284	36,043	38,229
Passenger cars ³	31,550	27,548	26,698	27,745	27,142	28,752	27,449	23,330	22,979	23,821	23,214	24,947
Mini-compact.....	3,263	3,559	3,753	4,001	3,973	4,346	2,966	3,194	3,278	3,470	3,429	3,647
Subcompact.....	4,875	4,649	4,884	5,275	5,445	6,006	4,158	3,881	4,000	4,346	4,422	4,770
Compact.....	1,118	1,565	1,936	2,670	3,445	4,274	927	1,210	1,499	2,081	2,635	3,312
Intermediate.....	5,224	5,305	5,382	5,976	6,064	6,555	3,878	3,919	3,985	4,287	4,391	4,783
Full size.....	7,026	5,691	5,381	5,199	4,906	5,094	4,631	3,651	3,489	3,269	2,974	3,191
Largest size.....	10,817	8,343	7,524	7,334	6,452	6,339	6,746	4,779	4,470	4,160	3,612	3,662
Unknown.....	5,134	3,863	3,264	2,905	2,689	2,053	3,943	2,695	2,258	2,008	1,751	1,602
Motorcycles.....	4,878	4,201	4,045	4,378	4,342	4,209	4,981	4,270	4,104	4,431	4,417	4,309
Moped, mini bike.....	180	177	158	172	151	250	183	183	161	177	147	257
Light trucks ²	10,841	9,597	9,347	10,255	10,470	11,179	6,566	5,580	5,395	5,773	5,834	6,390
Pickup.....	8,798	7,842	7,698	8,285	8,375	8,526	5,463	4,677	4,579	4,873	4,886	5,090
Van.....	2,009	1,722	1,615	1,737	1,807	1,952	1,000	814	712	764	791	879
Medium trucks.....	1,076	666	672	680	654	661	285	154	172	153	157	145
Heavy trucks ²	4,036	3,754	3,968	4,185	4,217	4,171	976	789	807	920	814	781
Single-unit ⁴	377	283	323	271	370	305	89	52	60	83	48	42
Two-unit ⁵	3,396	3,072	3,144	3,359	3,411	3,351	812	663	648	758	692	689
Buses.....	148	129	168	188	182	179	41	25	36	37	31	50
	329	288	305	302	304	282	46	35	53	45	55	39

¹ Each accident involving multiple types of vehicles is recorded in each category; therefore, the aggregate of all types will exceed the total number of accidents. ²Includes other types and unknown, not shown separately. ³Mini-compact wheel base less than 95 in.; subcompact, 95 in. to 98 in.; compact, 100 in. to 104 in.; intermediate, 105 in. to 109 in.; full size, 110-114 in.; and largest size greater than 115 in. ⁴Gross vehicle weight greater than 26,000 lbs. ⁵Tractor-trailer combination.

Source: U.S. National Highway Traffic Safety Administration, *Fatal Accident Reporting System*, annual.

NO. 1021. HIGHWAY MILEAGE, VEHICLE MILES OF TRAVEL, ACCIDENTS, AND FATALITIES, 1975 TO 1986, AND BY TYPE OF HIGHWAY SYSTEM, 1986

YEAR AND TYPE OF SYSTEM	High-way mileage (1,000)	Vehi- cle miles of travel (bil.)	Daily vehi- cle miles per mile	FATAL ACCIDENTS		NONFATAL INJURY ACCIDENTS		FATALITIES ²	
				Num- ber	Rate ¹	Num- ber (1,000)	Rate ¹	Num- ber	Rate ¹
1975, total.....	3,838	1,328	948	39,993	3.01	1,861	140	45,500	3.43
1980, total.....	3,857	1,527	1,082	45,284	2.96	2,008	131	51,091	3.35
1982, total.....	3,866	1,595	1,130	39,092	2.45	1,966	123	43,945	2.76
1983, total.....	3,880	1,653	1,167	37,976	2.30	2,005	121	42,589	2.58
1984, total.....	3,892	1,720	1,208	39,631	2.30	2,137	124	44,257	2.57
1985, total.....	3,862	1,774	1,259	39,168	2.21	2,219	125	43,795	2.47
1986, total.....	3,880	1,838	1,298	41,062	2.23	2,254	123	46,056	2.51
Urban.....	702	1,088	4,250	18,740	1.72	1,577	145	20,307	1.87
Rural.....	3,178	750	647	22,322	2.98	677	90	25,749	3.43
Interstate.....	44	391	24,411	3,716	.95	144	37	4,251	1.09
Urban.....	11	57	2,666	1,908	.83	107	46	2,139	.93
Rural.....	33	160	13,327	1,808	1.13	37	23	2,112	1.32
Noninterstate.....	3,826	1,447	1,034	37,346	2.58	2,110	146	41,805	2.89
Urban.....	691	857	3,401	16,632	1.96	1,470	172	18,188	2.12
Rural.....	3,145	590	514	20,514	3.47	640	108	23,637	4.00
Federal-aid highway system, total.....	847	1,483	4,795	30,757	2.07	1,498	101	34,794	2.35
Urban.....	190	880	12,678	14,585	1.66	1,102	125	15,568	1.80
Rural.....	657	603	2,514	16,192	2.69	396	66	18,936	3.14
Interstate.....	44	391	24,411	3,716	.95	144	37	4,251	1.09
Other primary arterial.....	259	537	5,677	12,584	2.34	512	95	14,579	2.71
Urban.....	33	251	20,891	4,014	1.60	317	126	4,408	1.75
Rural.....	226	286	3,461	8,570	3.00	195	68	10,171	3.58
Urban (arterial and collector).....	146	398	7,450	8,643	2.18	677	170	9,311	2.34
Secondary (collector).....	398	157	1,083	5,814	3.69	165	105	6,653	4.23
Non-Federal-aid highway system, total.....	3,032	355	321	10,305	2.90	756	213	11,262	3.17
Urban.....	511	208	1,116	4,175	2.01	476	229	4,449	2.14
Rural.....	2,521	147	160	6,130	4.16	280	190	6,813	4.63
Collector.....	349	70	553	2,061	2.92	101	143	2,301	3.26
Urban.....	19	27	2,799	309	1.57	20	102	332	1.68
Rural.....	330	51	422	1,752	3.45	81	159	1,969	3.88
Local.....	2,672	257	263	7,742	3.01	634	247	8,391	3.27
Urban.....	483	165	932	3,466	2.11	437	266	3,680	2.24
Rural.....	2,189	92	116	4,278	4.63	197	214	4,711	5.10

¹ Rate per 100 million vehicle miles of travel. ² Represents fatalities occurring within 30 days of accident. Excludes nontraffic accidents which, for example, occur outside the rights-of-way or other boundaries of roads that are open for public use.

Source: U.S. Federal Highway Administration, *Fatal and Injury Accident Rates on Public Roads in the United States*, annual.

No. 1022. MOTOR VEHICLE SAFETY DEFECT RECALLS, BY DOMESTIC AND FOREIGN MANUFACTURERS: 1975 TO 1987

[Covers manufacturers reporting to U.S. National Highway Traffic Administration under section 151 of National Traffic and Motor Vehicle Safety Act of 1966, as amended]

MANUFACTURER	Unit	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Motor vehicles:												
Total recall campaigns ¹	Number	217	271	275	167	156	135	140	164	173	174	199
Domestic	Number	190	199	218	129	128	107	110	127	137	139	150
Foreign	Number	27	72	57	38	28	28	30	37	36	35	49
Total vehicles recalled	1,000	2,109	9,063	8,919	4,863	9,405	1,914	6,114	7,220	5,629	2,880	9,091
Domestic	1,000	1,829	7,921	6,897	3,939	7,379	1,401	3,090	6,283	4,995	1,731	7,297
Vehicles recalled by 4 leading auto manufacturers	1,000	1,602	7,670	6,989	3,730	7,247	1,324	3,021	6,148	4,811	1,382	6,944
Foreign	1,000	280	1,141	1,922	924	2,026	513	3,024	937	634	1,149	1,793
Motor vehicle tires:												
Recall campaigns ¹	Number	22	31	42	24	25	17	21	16	19	14	16
Tires recalled	1,000	72	14,686	235	7,070	125	131	95	81	28	164	43

¹A recall campaign is the notification to the Secretary of the U.S. Dept. of Transportation and to owners, purchasers, and dealers, of a motor vehicle safety defect.

Source: U.S. National Highway Traffic Safety Administration, *Motor Vehicles Defect Recall Campaigns*, annual.

NO. 1023. LICENSED DRIVERS AND ESTIMATED ARRESTS FOR DRIVING UNDER THE INFLUENCE, BY AGE: 1975 AND 1986

[Total drivers and arrests in thousands. Represents licensed drivers and arrests for those 16 years old and over]

AGE	1975			1986			Percent change in rate, 1975-86
	Drivers	Arrests	Arrests per 100,000 drivers	Drivers	Arrests	Arrests per 100,000 drivers	
Total	129,671	946	729	158,494	1,792	1,130	55
Percent distribution	100.0	100.0	(X)	100.0	100.0	(X)	
16-17 years old	3.7	1.8	352	2.6	1.5	647	84
18-24 years old	18.9	25.3	978	15.7	28.8	2,075	112
25-29 years old	12.9	15.0	847	13.0	22.0	1,909	125
30-34 years old	10.3	12.2	867	12.2	15.8	1,471	70
35-39 years old	8.5	10.6	909	10.9	11.1	1,158	27
40-44 years old	7.9	9.8	904	8.5	7.2	958	7
45-49 years old	8.0	8.9	812	6.9	4.9	805	-1
50-54 years old	7.9	7.3	675	6.3	3.4	609	-10
55-59 years old	6.8	4.6	490	6.3	2.4	434	-11
60-64 years old	5.7	2.7	347	5.9	1.6	299	-14
65 years old and over	9.5	1.8	141	11.9	1.2	118	-16

X Not applicable.

Source: U.S. Bureau of Justice Statistics, *Drunk Driving, Special Report*.

NO. 1024. LICENSED DRIVERS, FATAL MOTOR-VEHICLE ACCIDENTS, AND ALCOHOL INVOLVEMENT, BY AGE OF DRIVER: 1987

ITEM	Unit	Total	AGE OF DRIVER							
			16-17 years	18-21 years	22-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over
Licensed drivers (estimated) ¹	1,000	161,975	4,202	12,400	11,583	40,738	32,369	21,367	19,339	19,860
Percent distribution	Percent	100.0	2.6	7.7	7.2	25.2	20.0	13.2	11.9	12.3
Licensed drivers involved in fatal accidents	Number	261,434	3,326	8,874	6,513	16,554	9,774	5,472	4,221	5,078
Percent distribution	Percent	100.0	5.4	14.4	10.6	26.9	15.9	8.9	6.9	8.3
Driving drivers involved in fatal accidents	Number	20,384	798	3,534	2,966	6,889	3,067	1,225	767	511
Percent distribution	Percent	100.0	3.9	17.3	14.6	33.8	15.0	6.0	3.8	2.5

¹ Source: U.S. Federal Highway Administration, *Selected Highway Statistics and Charts*, annual. ² Includes ages unknown and less than 16 years old.

Source: Except as noted, U.S. National Highway Traffic Safety Administration, unpublished data from the Fatal Accident Reporting System.

No. 1025. MOTOR VEHICLE TRAVEL, BY TYPE OF VEHICLE; AND SPEED: 1970 TO 1986

[Travel in billions of vehicle-miles, except as indicated. Travel estimates based on automatic traffic recorder data. Speed trend data for 1970-1975 were collected by several State highway agencies, normally during summer months; beginning Oct. 1975 all States have monitored speeds at locations on several highway systems as part of 55 mile per hour Speed Limit Monitoring Program. See also *Historical Statistics, Colonial Times to 1970*, series Q 199-207.]

YEAR	VEHICLE-MILES OF TRAVEL (bil.)				AVG. MILES PER VEHICLE (1,000)		MOTOR VEHICLE SPEED ²					
	Total	Cars ¹	Buses	Trucks	Passenger vehicles		Trucks	Vehicles recorded (1,000) ³	Avg. speed (miles per hour)	Percent of vehicles exceeding—		
					Cars ¹	Buses				55 m.p.h.	60 m.p.h.	65 m.p.h.
1970.....	1,110	920	4.5	186	10.0	12.0	9.9	200	63.8	87	69	44
1974.....	1,281	1,013	5.7	262	9.2	12.7	10.6	203	57.6	65	29	9
1975.....	1,328	1,040	6.1	282	9.3	13.1	10.9	102	57.6	68	27	7
1976.....	1,402	1,084	6.3	312	9.4	13.1	11.2	515	50.2	69	32	10
1977.....	1,467	1,116	5.8	346	9.5	11.9	11.8	500	58.8	74	35	10
1978.....	1,545	1,154	5.9	385	9.5	11.6	12.3	468	58.8	74	36	10
1979.....	1,529	1,122	5.9	401	9.1	11.3	12.2	506	58.3	72	32	9
1980.....	1,527	1,122	6.1	399	8.8	11.5	11.9	667	57.5	66	25	7
1981.....	1,553	1,142	6.2	405	8.9	11.5	11.7	3,048	57.9	68	30	9
1982.....	1,595	1,176	5.8	413	9.1	10.4	11.7	4,895	59.0	73	40	14
1983.....	1,653	1,207	5.2	441	9.1	8.9	12.0	7,856	59.1	74	41	15
1984.....	1,720	1,234	4.6	482	9.2	8.0	12.8	8,067	59.3	75	43	16
1985.....	1,774	1,270	4.9	500	9.2	8.2	12.7	8,449	59.5	75	44	17
1986.....	1,838	1,313	5.1	520	9.3	8.6	13.0	8,549	59.7	76	46	18

¹ Includes motorcycles. ² Represents speed on rural interstate highways. For 1970-1979, based on free flow speed of vehicles recorded on level, straight sections of rural Interstate highways during off-peak hours; beginning 1980, based on all vehicles on rural Interstate highways. Beginning 1976, for year ending Sept. 30. ³ Citations issued for 55 mph violations.

No. 1026. DOMESTIC MOTOR FUEL CONSUMPTION, BY TYPE OF VEHICLE: 1970 TO 1986

[Comprises all fuels (gas, diesel, or other fuels) used for propulsion of vehicles under State motor fuels laws. Excludes Federal purchases for military use. Minus sign (–) indicates decrease. See also *Historical Statistics, Colonial Times to 1970*, series Q 156-162.]

YEAR	FUEL CONSUMPTION				AVERAGE FUEL CONSUMPTION PER VEHICLE (gal.)				AVERAGE MILEAGE PER GALLON				
	All vehicles (bil. gal.)	Avg. annual percent change ¹	Cars ² (bil. gal.)	Buses ³ (bil. gal.)	Trucks ⁴ (bil. gal.)	All vehicles	Cars ²	Buses ³	Trucks ⁴	All vehicles	Cars ²	Buses ³	Trucks ⁴
1970.....	92.3	5.4	67.8	.8	23.6	830	760	2,172	1,257	12.02	13.52	5.54	7.85
1973.....	110.5	6.2	78.7	1.0	30.7	850	771	2,326	1,321	11.89	13.30	5.86	8.34
1974.....	106.3	-3.8	75.1	1.0	30.1	788	716	2,159	1,224	12.05	13.42	5.89	8.70
1975.....	109.0	2.5	76.4	1.1	31.4	790	716	2,279	1,217	12.18	13.52	5.75	8.99
1976.....	115.7	6.2	79.7	1.0	34.8	806	723	2,188	1,250	12.12	13.53	5.98	8.85
1977.....	119.6	3.4	80.4	1.0	38.1	814	716	1,984	1,301	12.26	13.80	5.98	9.06
1978.....	125.1	4.5	81.7	1.0	42.3	816	701	1,957	1,349	12.35	14.04	5.95	9.11
1979.....	122.1	-2.4	77.3	1.0	43.6	776	653	1,891	1,326	12.52	14.41	5.97	9.19
1980.....	115.0	-5.9	71.9	1.0	41.9	712	591	1,926	1,243	13.29	15.46	5.95	9.54
1981.....	114.5	-4	71.0	1.1	42.2	697	576	1,938	1,219	13.57	15.94	5.92	9.59
1982.....	113.4	-9	70.1	1.0	42.1	666	566	1,756	1,191	14.07	16.65	5.93	9.80
1983.....	116.1	2.4	69.9	.9	45.1	686	553	1,507	1,229	14.24	17.14	5.92	9.77
1984.....	118.7	2.3	68.7	.8	49.0	691	536	1,359	1,308	14.49	17.83	5.85	9.83
1985.....	121.3	2.2	69.3	.8	51.0	685	525	1,407	1,302	14.62	18.20	5.84	9.79
1986.....	125.2	3.2	71.2	.9	52.9	690	525	1,600	1,318	14.68	18.32	5.71	9.88

¹ From prior year shown. For 1970, change from 1965. ² Includes taxicabs. ³ Includes school buses.

⁴ Includes combinations.

Source of tables 1025 and 1026: U.S. Federal Highway Administration, *Highway Statistics Summary to 1985*, and *Highway Statistics*, annual.

No. 1027. DOMESTIC MOTOR GASOLINE SUPPLY: 1974 TO 1987

[In 1,000 barrels per day, except as noted]

YEAR	SUPPLY ¹		Pro- duction	Net im- ports	Stocks ² (mil. bbls.)	YEAR	SUPPLY ¹		Pro- duction	Net im- ports	Stocks ² (mil. bbls.)		
	Total	Unleaded					Total	Unleaded					
		Percent						Percent					
1974, avg.....	6,537	(NA)	(NA)	6,360	202	218	1981, avg.....	6,588	3,264	49.5	6,405	155	253
1975, avg.....	6,675	(NA)	(NA)	6,520	182	235	1982, avg.....	6,639	3,409	52.1	6,338	177	235
1976, avg.....	6,978	1,506	21.6	6,841	128	231	1983, avg.....	6,622	3,647	55.1	6,340	237	222
1977, avg.....	7,177	1,976	27.5	7,033	215	258	1984, avg.....	6,693	3,987	59.6	6,453	293	243
1978, avg.....	7,412	2,521	34.0	7,169	189	238	1985, avg.....	6,831	4,406	64.5	6,419	371	223
1979, avg.....	7,034	2,798	39.8	6,852	181	237	1986, avg.....	7,034	4,854	69.0	6,752	293	233
1980, avg.....	6,579	3,067	46.6	6,506	139	261	1987, avg.....	7,206	5,470	75.9	6,841	349	226

NA. Not available. ¹ Production plus net imports less net increase in primary stocks. ² End of year, includes motor gasoline blending components.

Source: U.S. Energy Information Administration, *Monthly Energy Review*, April 1988.

NO. 1028. HOUSEHOLD VEHICLES: ANNUAL MILEAGE, FUEL CONSUMPTION, AND FUEL EXPENDITURES: 1985

[See headnote, table 1029]

HOUSEHOLD AND VEHICLE CHARACTERISTICS	NUMBER OF—			MILES DRIVEN		GALLONS CONSUMED		EXPENDITURES		
	Households (millions)	Vehicles (millions)	Vehicles per household	Total (billion)	Percent	Total (billion)	Percent	Total (bil. dol.)	Percent	
Total	77.7	137.3	1.8	1,353	100.0	83.9	100.0	99.1	100.0	
Metropolitan status:										
Metropolitan.....	59.0	103.0	1.7	1,029	76.1	62.6	74.6	73.8	74.5	
Central city.....	25.5	41.0	1.6	383	28.3	23.9	28.5	28.3	28.5	
Outside central city.....	33.6	62.0	1.8	646	47.8	38.7	46.1	45.6	46.0	
Nonmetropolitan.....	18.7	34.3	1.8	324	23.9	21.3	25.4	25.2	25.5	
Origin of householder: White:										
Black.....	68.1	122.3	1.8	1,204	89.0	74.3	88.5	87.7	88.5	
Hispanic descent: Yes.....	7.2	11.0	1.5	112	8.3	7.4	8.9	8.8	8.8	
No.....	3.5	6.0	1.7	58	4.3	3.6	4.3	4.3	4.3	
Household size: 1 person.....	74.3	131.3	1.8	1,295	95.7	80.3	95.7	94.8	95.7	
Household size: 2 persons.....	15.9	19.0	1.2	162	12.0	10.0	11.9	11.8	12.0	
3 persons.....	24.5	41.3	1.7	386	28.6	23.5	28.0	27.8	28.0	
4 persons.....	14.6	29.0	2.0	293	21.7	18.2	21.7	21.5	21.7	
5 or more persons.....	12.9	26.6	2.1	281	20.8	17.8	21.3	21.0	21.2	
Family income: 1985:										
Less than \$5,000.....	3.7	4.4	1.2	34	2.5	2.4	2.8	2.8	2.8	
\$5,000-\$9,999.....	9.7	12.5	1.3	98	7.2	6.7	8.0	7.8	7.9	
\$10,000-\$14,999.....	10.7	15.8	1.5	149	11.0	9.8	11.7	11.5	11.6	
\$15,000-\$19,999.....	9.7	15.8	1.6	141	10.4	9.0	10.7	10.5	10.6	
\$20,000-\$24,999.....	9.5	16.9	1.8	185	12.2	10.4	12.3	12.2	12.3	
\$25,000-\$34,999.....	14.7	28.2	1.9	289	21.4	17.8	21.3	21.0	21.2	
\$35,000 or more.....	19.8	43.7	2.2	477	35.2	27.9	33.2	33.3	33.6	
Number of drivers (fall 1984): 1	24.7	29.6	1.2	257	19.0	16.1	19.1	19.0	19.2	
2.....	39.1	73.1	1.9	730	53.9	45.3	54.0	53.5	54.0	
3 or more.....	12.5	32.9	2.6	352	26.0	21.7	25.8	25.7	25.9	
Type of fuel: Leaded.....		(x)	42.0	(x)	332	24.5	24.5	29.2	27.3	27.6
Unleaded.....		(x)	92.8	(x)	990	73.2	57.8	68.9	69.9	70.6
Type of vehicle: Automobile.....		(x)	106.6	(x)	1,059	78.3	61.7	73.5	73.4	74.1
Jeep-like vehicle.....	(x)	3.7	(x)	39	2.9	3.1	3.8	3.6	3.6	3.6
Van.....	(x)	4.7	(x)	49	9.6	3.7	4.4	4.3	4.3	4.4
Pickup truck.....	(x)	21.2	(x)	199	14.7	14.7	17.5	16.9	17.1	
Number of cylinders: 4		(x)	39.9	(x)	445	32.9	19.6	23.4	23.5	23.7
6.....	(x)	35.6	(x)	362	26.8	22.7	27.0	26.9	27.2	
8.....	(x)	61.0	(x)	536	39.6	41.1	49.0	48.1	48.5	
Air conditioning: Yes.....		(x)	86.3	(x)	885	65.4	55.2	65.8	65.6	66.2
No.....		(x)	51.0	(x)	468	34.6	28.7	34.2	33.5	33.8
Type of transmission:										
Automatic.....	(x)	99.0	(x)	954	70.5	63.2	75.4	74.7	75.4	
Manual.....	(x)	38.3	(x)	399	29.5	20.7	24.6	24.4	24.6	
Vehicle used on the job: Yes.....		(x)	17.3	(x)	203	15.0	12.8	15.0	15.0	15.2
No.....		(x)	120.0	(x)	1,150	85.0	71.3	85.0	84.0	84.8

X Not applicable.

NO. 1029. HOUSEHOLD MOTOR VEHICLE TRANSPORTATION, BY VEHICLE MODEL YEAR: 1985

[Preliminary. Household vehicles include all motorized vehicles used for personal transportation, excluding motorcycles, mopeds, large trucks, and buses. The reporting unit for 1985 is all households which owned a vehicle at any time during 1985. Based on the Residential Transportation Energy Consumption Survey; subject to sampling variability.]

HOUSEHOLD CHARACTERISTICS	Households with motor vehicles (mil.)	VEHICLES (millions)				MILES PER GALLON					
		Model year				Average	Model year				
		Total	1973 and earlier	1974 to 1978	1979 to 1982		1973 and earlier	1974 to 1978	1979 to 1982		
Total.....	77.7	137.3	26.9	43.3	37.8	26.7	16.1	13.4	13.8	17.9	19.3
Northeast.....	15.0	24.8	3.0	8.1	7.6	6.1	17.0	13.6	14.0	18.8	20.2
Midwest.....	19.5	34.1	6.4	11.4	9.0	7.0	15.6	12.6	13.2	17.6	19.1
South.....	27.0	48.5	9.2	15.0	13.8	10.5	15.8	12.9	13.5	17.4	18.9
West.....	16.1	29.8	8.3	8.9	7.3	5.1	16.5	14.4	15.0	18.3	19.2
Family income in 1985:											
Less than \$5,000.....	3.7	4.4	1.4	1.7	.7	.6	14.2	12.5	13.7	17.5	15.6
\$5,000-\$9,999.....	9.7	12.5	4.3	4.4	2.4	1.4	14.6	13.3	12.7	16.8	19.9
\$10,000-\$14,999.....	10.7	15.8	4.4	5.8	3.8	1.8	15.2	13.4	13.8	17.5	18.9
\$15,000-\$19,999.....	9.7	15.8	3.5	5.7	3.9	2.6	15.7	12.9	13.4	18.1	20.4
\$20,000-\$24,999.....	9.5	16.9	3.1	5.5	4.7	3.4	16.0	13.3	14.0	17.9	18.9
\$25,000-\$34,999.....	14.7	28.2	4.5	9.2	8.5	5.9	16.2	13.2	14.0	18.2	19.0
\$35,000 or more.....	19.8	43.7	5.7	11.0	13.7	13.1	17.1	13.9	14.3	17.9	19.4

Source of tables 1028 and 1029: U.S. Energy Information Administration, *Residential Transportation Energy Consumption Survey: Consumption Patterns of Household Vehicles, 1985*.

NO. 1030. COST OF OWNING AND OPERATING AN AUTOMOBILE: 1975 TO 1987

ITEM	Unit	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Cost per mile ¹	Cents.....	18.31	20.19	19.57	23.97	27.95	31.92	32.35	33.42	31.32	27.20	29.59	32.64
Cost per 10,000 miles ¹	Dollars.....	1,831	2,019	1,957	2,397	2,795	3,192	3,235	3,342	3,132	2,720	2,959	3,264
Variable cost.....	Cents/mile.....	6.45	5.80	5.65	5.86	7.62	8.17	8.37	8.38	7.86	8.04	6.52	7.20
Gas and oil.....	Cents/mile.....	4.82	4.11	3.89	4.11	5.86	6.27	6.74	6.64	6.19	6.16	4.48	4.80
Maintenance.....	Cents/mile..	.97	1.03	1.10	1.10	1.12	1.18	1.00	1.04	1.04	1.23	1.37	1.60
Tires.....	Cents/mile..	.66	.66	.65	.64	.72	.63	.68	.63	.65	.57	.57	.80
Fixed cost.....	Dollars.....	1,186	1,439	1,392	1,811	2,033	2,375	2,398	2,506	2,346	2,441	2,596	2,782
Insurance.....	Dollars.....	53	80	57	74	70	76	53	80	80	92	86	87
Fire and theft ²	Dollars.....	141	188	138	168	172	180	153	201	200	198	191	196
Property damage ³ and liability.....	Dollars.....	189	250	229	241	248	254	243	222	225	213	232	252
License and registration.....	Dollars.....	30	74	74	90	82	88	54	102	106	115	130	140
Depreciation.....	Dollars.....	773	847	894	942	1,038	1,287	1,356	1,343	1,207	1,253	1,320	1,506
Finance charge.....	Dollars.....	(NA)	(NA)	(NA)	296	423	490	539	558	528	570	637	601
Average fixed cost per day.....	Dollars.....	3.25	3.94	3.81	4.96	5.57	6.51	6.57	6.87	6.43	6.69	7.11	7.82

NA Not available. ¹ Beginning 1985, not comparable to previous data. ² \$50 deductible 1975 and 1977, and \$100 deductible 1978 through 1987. ³ \$100 deductible 1975 and 1977, and \$250 deductible 1978 through 1987. ⁴ Coverage: \$100,000/\$300,000.

Source: Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, MI, *Motor Vehicle Facts and Figures*, annual.

NO. 1031. PASSENGER TRANSIT INDUSTRY—SUMMARY: 1970 TO 1987

[Includes Puerto Rico. Comprises all privately and publicly owned organized local passenger transportation agencies, except taxicabs and sightseeing and school buses. Covers (a) local motorbus systems, (b) light rail systems, (c) heavy rail systems, (d) trolley coach systems, and (e) automated guideway, inclined plane, cable car, and aerial tramway systems. Beginning 1984, data also include suburban railroads, urban ferry boats, rural fixed-route non-intercity motorbus systems, vanpools and demand response systems. Thus, all data are non-contiguous between 1983 and 1984. Based on financial and statistical reports received by American Public Transit Association from transit systems representing more than 85 percent of the industry. See also *Historical Statistics, Colonial Times to 1970*, series Q 238-250.]

ITEM	Unit	1970	1975	1980	1981	1982	1983	1984	1985	1986, prel.	1987, prel.
Operating systems.....	Number.....	1,079	947	1,044	1,035	1,036	1,036	4,938	4,973	5,019	5,048
Motorbus systems ¹	Number.....	1,075	941	1,040	1,030	1,031	1,031	2,604	2,632	2,654	2,672
Publicly owned systems ¹	Number.....	144	333	576	578	581	599	(NA)	1,435	(NA)	(NA)
Passenger vehicles owned ²	Number.....	61,428	62,261	71,018	72,098	73,838	73,813	95,603	88,691	91,218	91,115
Motorbuses ²	Number.....	49,700	50,811	59,411	60,393	62,111	62,093	63,497	57,285	58,000	57,687
Heavy rail ²	Number.....	9,286	9,556	9,641	9,749	9,815	9,891	9,083	9,326	10,386	10,168
Other electric ^{2,3}	Number.....	2,442	1,894	1,866	1,956	1,909	1,829	1,527	1,623	1,519	1,581
Suburban rail.....	Number.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	4,075	4,035	4,440	4,656
All other.....	Number.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	17,421	16,422	16,873	17,023
Total revenue.....	Mil. dol.	(NA)	3,451	6,510	7,366	8,044	8,626	11,623	12,195	13,147	13,968
Passenger revenue.....	Mil. dol.	1,639	1,861	2,557	2,701	3,077	3,172	4,448	4,575	5,011	5,156
Other operating revenue ⁴	Mil. dol.	68	183	248	344	380	333	788	702	743	771
Operating assistance.....	Mil. dol.	(NA)	1,408	3,705	4,321	4,587	5,023	6,395	6,918	7,393	8,014
Federal.....	Mil. dol.	302	1,094	1,095	1,005	827	996	940	912	894	894
State and local.....	Mil. dol.	(NA)	1,106	2,611	3,226	3,582	4,195	5,399	5,978	6,491	7,147
Total expense.....	Mil. dol.	1,996	3,752	6,711	7,623	8,314	8,736	12,957	14,077	15,080	15,997
Operating expense.....	Mil. dol.	(NA)	3,537	6,246	7,024	7,553	7,956	11,574	12,381	13,353	13,967
Transportation.....	Mil. dol.	(NA)	1,877	3,248	3,598	3,882	3,931	5,142	5,655	6,106	6,019
Maintenance.....	Mil. dol.	(NA)	814	1,774	1,946	2,168	2,392	3,062	3,672	3,965	4,310
Administration.....	Mil. dol.	(NA)	846	1,224	1,482	1,503	1,634	3,370	3,084	3,282	3,635
Reconciling expense.....	Mil. dol.	215	464	597	761	780	1,383	1,696	1,727	2,030	
Capital expenditure, Federal.....	Mil. dol.	(NA)	1,287	2,787	2,946	2,544	3,162	2,876	2,510	3,137	2,476
Vehicle-miles operated.....	Million.....	1,884	1,989	2,094	2,134	2,129	2,117	2,749	2,791	2,890	2,962
Motorbus.....	Million.....	1,409	1,526	1,677	1,685	1,659	1,678	1,845	1,863	1,896	1,927
Heavy rail.....	Million.....	407	423	385	420	429	408	436	451	476	490
Other electric ³	Million.....	68	40	32	29	31	31	32	33	33	34
Suburban rail.....	Million.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	168	183	186	189
All other.....	Million.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	268	281	299	322
Passengers carried ⁵	Million.....	7,361	6,988	8,249	7,978	7,755	7,903	8,851	8,659	8,801	8,340
Motorbus ⁵	Million.....	5,034	5,084	5,837	5,594	5,324	5,422	5,908	5,675	5,748	5,207
Heavy rail ⁵	Million.....	1,881	1,673	2,108	2,094	2,115	2,167	2,231	2,290	2,333	2,402
Other electric ^{3,5}	Million.....	446	231	304	290	316	314	329	303	304	300
Suburban rail.....	Million.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	267	275	303	311
All other.....	Million.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	116	116	113	120
Avg. revenue per passenger.....	Cents.....	22.4	26.7	31.0	33.9	39.7	40.2	50.3	52.8	56.9	61.8
Employees, number (avg.).....	1,000.....	138	160	187	192	194	195	263	270	276	275
Payroll, employee.....	Mil. dol.	1,274	2,236	3,281	3,494	3,731	3,921	5,488	5,843	6,228	6,540

NA Not available. ¹ Includes systems with combined services including motorbuses, heavy rail cars, light rail cars, trolley coaches, cable cars, and inclined plane cars. Beginning 1984, combined services also include suburban railroads, urban ferry boats, vanpools, aerial tramways, automated guideways, and demand response vehicles. ² Beginning 1984, includes active vehicles only. ³ Includes light rail, trolley coach, cable car, inclined plane, aerial tramway, and automated guideways. ⁴ Includes other operating revenue, non-operating revenue, and auxiliary income. ⁵ Data for 1970 and 1975 not comparable with later years.

Source: American Public Transit Association, Washington, DC, *Transit Fact Book*, annual.

Transportation—Land

NO. 1032. CLASS I INTERCITY MOTOR CARRIERS OF PASSENGERS: 1970 TO 1986

[Carriers subject to ICC regulations. See text, section 21. Minus sign (–) indicates deficit. See also *Historical Statistics, Colonial Times to 1970*, series Q 69-75]

ITEM	Unit	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986
Carriers reporting ¹	Number.....	71	77	43	45	48	45	50	45	43	43	29
Number of employees, average.....	1,000.....	34	31	26	27	31	31	30	25	24	20	20
Compensation of employees.....	Mil. dol.	317	383	412	469	599	630	646	570	551	518	443
Operating revenue.....	Mil. dol.	722	942	2,021	1,200	1,397	1,453	1,447	1,276	1,255	1,232	1,117
Passenger revenue ¹	Mil. dol.	524	651	671	802	947	993	969	876	861	836	765
Special bus revenue and other.....	Mil. dol.	198	291	345	398	215	202	229	180	180	164	155
Operating expenses.....	Mil. dol.	639	880	983	1,143	1,918	1,981	1,416	1,283	1,254	1,169	1,082
Net operating revenue.....	Mil. dol.	83	61	38	57	79	72	30	-7	1	65	35
Ordinary income:												
Before income taxes	Mil. dol.	88	83	57	57	107	88	35	16	53	65	50
After income taxes.....	Mil. dol.	52	56	41	57	90	61	37	26	43	53	36
Passenger vehicles in service ³	1,000.....	13.3	9.7	8.5	8.2	8.6	8.4	8.1	7.3	7.0	8.4	8.3
Vehicle-miles, passenger.....	Million.....	871	835	726	754	781	732	717	591	585	567	495
Revenue passengers carried.....	Million.....	174	147	119	122	134	114	112	94	89	88	74
Expense per vehicle-mile.....	Dollar.....	.73	1.05	1.35	1.52	1.69	1.89	1.98	2.17	2.14	2.06	2.18

¹ Excludes carriers preponderantly in local or suburban service and carriers engaged in transportation of both property and passengers. ² Includes \$4 million from Government authorities for current operations. ³ Regular route, intercity and local.

Source: U.S. Interstate Commerce Commission, 1970, *Transport Statistics in the United States*, Part 7, and 1975-1984, Part 2, annual.

NO. 1033. INTERCITY BUS LINES—SUMMARY OF OPERATIONS: 1970 TO 1987

ITEM	Unit	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
Operating companies.....	Number.....	1,000	950	1,200	1,330	1,470	1,520	(NA)	(NA)	(NA)	(NA)	(NA)
Buses.....	Number.....	22.0	20.5	21.3	21.4	21.7	20.9	20.4	20.1	20.1	19.1	18.4
Miles of highway served (Dec. 31) ¹	1,000.....	267	274	280	279	276	273	270	266	263	257	249
Employees (Dec. 31) ²	1,000.....	50	47	48	49	50	48	45	44	43	41	39
Bus miles, total.....	Million.....	1,209	1,126	1,153	1,182	1,151	1,115	1,027	1,016	997	945	914
Revenue passengers.....	Million.....	401	351	368	370	370	369	352	352	353	346	333
Charter and tour passengers.....	Million.....	92	145	185	195	204	206	209	(NA)	(NA)	(NA)	(NA)
Revenue passenger-miles.....	Billion.....	25.3	25.4	27.7	27.4	268	27.3	25.4	35.2	32.8	22.5	21.9
Operating revenue, all services.....	Mil. dol.	901	1,172	1,664	1,943	2,097	2,070	1,953	1,914	1,898	1,838	1,717
Operating expenses.....	Mil. dol.	812	1,103	1,572	1,811	1,982	2,013	1,938	1,895	1,839	1,781	1,669
Net operating revenue ³	Mil. dol.	89	69	92	132	115	57	15	18	59	57	48

NA Not available. ¹ Includes duplication between carriers. ² Operating companies only. ³ Before income taxes.

Source: American Bus Association, Washington, DC, *Bus Facts*, annual; and *Annual Report*.

NO. 1034. WAREHOUSING SERVICES—OPERATING REVENUES, OPERATING EXPENSES, AND PAYROLL: 1985 TO 1987

(In millions of dollars)

SIC ¹ code	KIND OF BUSINESS	OPERATING REVENUES			OPERATING EXPENSES			ANNUAL PAYROLL		
		1985	1986	1987	1985	1986	1987	1985	1986	1987
42	Motor freight transportation and warehousing services ²	86,842	91,544	97,684	82,855	85,472	92,608	26,973	27,798	29,780
421	Trucking, local and long distance.....	82,212	86,614	92,494	78,619	81,193	88,142	25,576	26,305	28,257
422	Public warehousing.....	4,415	4,750	4,911	3,847	4,131	4,211	1,322	1,433	1,422
4221	Farm product warehousing and storage.....	518	(D)	617	457	(D)	510	(D)	(D)	343
4222	Refrigerated warehousing.....	1,007	1,135	1,231	872	999	1,017	313	349	343
4224	Household goods warehousing and storage.....	293	238	251	200	187	196	53	54	58
4225, 6	General warehousing and storage and special warehousing and storage not elsewhere classified.....	2,657	2,856	2,812	2,319	2,500	2,488	811	884	862

¹ Data do not meet publication standards because of high sampling error or high imputation rate. ² Standard Industrial Classification. ³ Includes terminal and joint terminal maintenance facilities for motor freight transportation (SIC 4231) not shown separately.

Source: U.S. Bureau of the Census, *Current Business Reports*, 1987 Motor Freight Transportation and Warehousing Survey.

NO. 1035. TRUCKING SERVICES—OPERATING REVENUES, OPERATING EXPENSES, AND EQUIPMENT, BY TYPE OF CARRIER: 1985 TO 1987

(In millions of dollars, except as indicated. Data cover SIC group 421. Estimates include both regulated and nonregulated carriers; excluded are non-employers (i.e., firms with no paid employees) and private fleets operated as auxiliary establishments to nontransportation companies. Some unpublished estimates may be derived from this table by subtraction, but such figures are subject to high sampling variability and should be used with caution.)

ITEM	ALL CARRIERS			SPECIALTY FREIGHT CARRIERS			GENERAL FREIGHT CARRIERS		
	1985	1986	1987	1985	1986	1987	1985	1986	1987
Operating revenues:									
Total	\$8,212	86,614	92,494	28,807	31,287	33,202	53,405	55,328	59,293
Motor carrier	76,996	80,699	86,801	25,531	27,186	29,308	51,465	53,513	57,493
Local trucking	16,609	15,634	18,603	8,598	9,452	10,854	8,011	6,182	7,749
Intercity trucking	60,387	65,085	68,198	16,933	17,734	18,454	43,454	47,330	49,744
Operating expenses:									
Total	78,819	81,193	88,142	27,348	29,601	31,438	51,471	51,592	56,703
Annual payroll	25,576	26,305	26,257	7,274	7,571	8,089	18,303	18,734	20,168
Employer contributions to Social Security and other supplemental labor benefits	5,851	5,940	6,480	1,367	1,459	1,582	4,484	4,481	4,898
Purchased fuels	6,414	5,244	5,676	2,059	1,678	1,894	4,354	3,566	3,782
Cost of purchased transportation	(NA)	19,097	19,901	(NA)	8,715	8,448	(NA)	10,381	11,454
Lease and rental payments	1,235	1,520	1,679	474	644	735	761	876	945
Cost of insurance	(NA)	3,053	3,513	(NA)	1,223	1,454	(NA)	1,830	2,059
Maintenance and repair costs	(NA)	4,374	4,728	(NA)	1,774	1,901	(NA)	2,600	2,827
Depreciation	3,941	4,157	4,585	1,500	1,573	1,821	2,441	2,584	2,764
Taxes and licenses	1,832	1,829	1,867	582	597	699	1,250	1,233	1,169
Other	(NA)	9,674	11,455	(NA)	4,367	4,817	(NA)	5,308	6,638
Equipment (1,000 units):²									
Trucks	216	201	228	(8)	77	89	(8)	124	137
Truck-tractors	469	461	502	167	165	167	302	295	334
Trailers, full and semi	1,011	1,055	1,164	246	254	312	765	801	652

NA Not available. S Data do not meet publication standards. ¹Includes other revenues not shown separately.

²Represents revenue generating freight equipment as of December 31. Includes owned and leased equipment.

Source: U.S. Bureau of the Census, *Current Business Reports, 1987 Motor Freight Transportation and Warehousing Survey*.

NO. 1036. CLASS I INTERCITY MOTOR CARRIERS OF PROPERTY, BY CARRIER: 1975 TO 1986

[See headnote, table 1032. Common carriers are carriers offering regular scheduled service. Contract carriers provide service at request of user. Minus sign (—) indicates loss]

ITEM	Unit	1975	1980	1985	1986	1975	1980	1985	1986
		COMMON CARRIER, GENERAL FREIGHT				COMMON CARRIER OTHER THAN GENERAL FREIGHT			
Carriers reporting									
Number		368	298	237	215	330	441	397	391
Number of employees, average	1,000	379	413	376	396	94	101	76	76
Compensation of employees	Mill. dol.	5,728	9,803	10,217	10,839	1,046	1,931	1,783	1,817
Operating revenues	Mill. dol.	11,116	19,725	22,314	23,387	3,907	8,792	7,962	8,162
Intercity freight	Mill. dol.	10,511	19,480	22,080	23,158	3,717	8,393	7,664	7,839
Operating expenses	Mill. dol.	10,571	18,870	21,037	21,779	3,758	8,426	7,752	7,870
Ordinary income before taxes	Mill. dol.	492	701	1,198	1,502	109	230	123	203
Net income	Mill. dol.	225	—72	658	837	65	14	94	138
Total power units, intercity service	1,000	78	102	108	113	69	95	77	78
Trucks, tractors owned in operation, avg	1,000	49	73	82	87	25	33	29	28
Intercity vehicle-miles	Million	6,246	6,547	5,760	5,900	4,776	6,889	5,714	5,904
Tons of intercity revenue freight carried	Million	191	178	135	135	264	324	303	299
Contract carriers									
ITEM	Unit	CONTRACT CARRIER OTHER THAN GENERAL FREIGHT				CARRIERS OF HOUSEHOLD GOODS			
		Number	50	69	64	62	32	28	40	42
Number of employees, average	1,000	10	14	22	18	4	10	11	12
Compensation of employees	Mill. dol.	175	336	630	520	70	157	240	262
Operating revenues	Mill. dol.	453	1,272	1,942	1,810	866	1,824	2,684	2,843
Intercity freight	Mill. dol.	411	1,172	1,792	1,647	765	1,676	2,398	2,485
Operating expenses	Mill. dol.	432	1,207	1,807	1,701	849	1,781	2,635	2,782
Ordinary income before taxes	Mill. dol.	17	48	103	80	32	74	79	66
Net income	Mill. dol.	9	28	69	46	18	42	54	49
Total power units, intercity service	1,000	8	13	16	16	18	25	35	34
Trucks, tractors owned in operation, avg	1,000	5	7	11	10	(Z)	1	1	1
Intercity vehicle-miles	Million	454	934	1,227	1,177	688	969	1,171	1,202
Tons of intercity revenue freight carried	Million	21	37	41	38	3	5	7	7

Z Less than 500.

Source: U.S. Interstate Commerce Commission, *Transport Statistics in the United States*, Part 2, annual.

Transportation—Land

NO. 1037. RAILROADS, CLASS I—SUMMARY: 1970 TO 1987

[As of Dec. 31, or calendar year data, except as noted. Compiled from annual reports of class I railroads only, except where noted. Beginning 1983, financial data are not comparable with earlier years due to change in method of accounting for track and related structures. Minus sign (-) indicates deficit. See also *Historical Statistics, Colonial Times to 1970*, series Q 264-312, Q 319, Q 330, Q 356-378, and Q 400-401.]

ITEM	Unit	1970	1975	1980	1982	1983	1984	1985	1986	1987
Class I line-hauling companies ¹	Number	71	73	39	33	32	29	23	22	18
Employees ²	1,000	586	494	480	397	342	344	302	276	248
Compensation ³	Mil. dol.	5,711	7,475	11,318	11,021	10,945	11,004	10,563	9,900	9,373
Average per hour	Dollars	4.14	6.39	10.21	12.26	13.29	13.84	14.30	14.75	15.11
Average per year	Dollars	10,085	15,324	24,859	29,087	32,125	34,084	34,991	35,894	37,718
Mileage:										
Railroad line owned ⁴	1,000	206	199	179	165	161	157	155	154	152
Railroad track owned ⁴	1,000	336	324	290	275	270	264	257	256	254
Equipment:										
Locomotives in service	Number	27,088	28,210	28,396	27,073	25,838	24,506	22,932	21,045	19,822
Average horsepower	1,000 lb.	1,928	2,121	2,802	2,341	2,364	2,415	2,489	2,531	2,554
Cars in service:										
Passenger-train	Number	11,177	6,471	4,347	3,736	2,610	2,580	2,502	2,307	2,350
Freight train ⁵	1,000	1,784	1,724	1,711	1,588	1,543	1,486	1,422	1,339	1,288
Freight cars ⁶	1,000	1,454	1,359	1,168	1,039	1,007	948	867	799	748
Average capacity ⁷	Tons	67.1	72.9	78.5	81.8	82.4	83.4	83.2	84.1	85.0
Aggregate capacity ⁷	Mil. tons	95.6	99.2	92.7	84.8	83.0	80.0	72.2	67.2	63.6
Box ⁸	1,000	590	475	347	278	271	245	216	180	163
Gondola and hopper ⁸	1,000	724	680	636	594	577	552	505	473	445
Other ⁸	1,000	140	204	185	167	159	151	145	146	141
Income and expenses:										
Operating revenues	Mil. dol.	11,992	16,402	28,258	27,504	26,729	29,463	27,588	26,204	26,457
Operating expenses	Mil. dol.	11,478	15,936	26,355	26,490	24,106	25,800	25,225	24,896	23,702
Net revenue from operations	Mil. dol.	514	466	1,902	1,013	2,623	3,653	2,361	1,908	2,754
Income before fixed charges	Mil. dol.	994	1,094	2,897	2,465	3,608	4,893	3,393	2,480	3,921
Provision for taxes ⁹	Mil. dol.	88	58	592	340	851	1,185	660	163	1,050
Ordinary Income	Mil. dol.	227	144	1,129	1,152	1,778	2,654	1,798	747	1,859
Net income	Mil. dol.	227	144	1,129	1,152	1,797	2,701	1,882	544	2,049
Net railway operating income	Mil. dol.	486	351	1,339	742	1,838	2,537	1,746	507	1,785
Total taxes ⁹	Mil. dol.	1,069	1,706	2,585	2,628	3,014	3,577	3,088	2,612	1,050
Industry return on net investment	Percent	1.7	1.2	4.2	2.1	4.3	5.7	5.8	4.9	5.7
Gross capital expenditures	Mil. dol.	1,951	1,790	3,238	2,168	2,985	4,121	4,485	3,645	3,082
Equipment	Mil. dol.	993	1,303	2,280	848	455	806	965	693	656
Roadway and structures	Mil. dol.	358	486	953	1,318	2,306	2,938	3,458	2,908	2,301
Other	Mil. dol.	-	-	5	2	224	377	62	44	105
Balance sheet:										
Total property investment	Mil. dol.	38,213	40,344	43,923	47,311	62,964	63,471	64,241	64,781	65,135
Accrued depreciation and amortization	Mil. dol.	10,027	10,605	10,706	12,051	19,480	20,098	19,758	20,940	21,058
Net investment	Mil. dol.	28,186	29,740	33,217	35,226	43,483	45,435	46,237	45,344	45,536
Shareholder's equity	Mil. dol.	17,323	14,942	19,860	21,349	26,481	27,986	27,605	25,442	25,580
Net working capital	Mil. dol.	-59	68	897	1,372	1,325	1,844	1,084	743	91
Cash dividends	Mil. dol.	421	434	510	1,038	1,085	1,066	1,444	1,376	1,252
AMTRAK passenger traffic:										
Passenger revenue	Mil. dol.	(NA)	(NA)	(NA)	465.1	515.3	556.7	604.9	633.6	681.1
Revenue passengers carried	1,000	(NA)	(NA)	(NA)	18,725	19,469	20,065	20,945	20,165	20,727
Revenue passenger miles	Mil.	(NA)	(NA)	(NA)	4,122	4,343	4,566	4,977	5,015	5,388
Averages:										
Revenue per passenger	Dol.	(NA)	(NA)	(NA)	24.80	26.38	28.23	28.88	31.42	32.85
Revenue per passenger mile	Cents	(NA)	(NA)	(NA)	11.26	11.83	12.43	12.15	12.63	12.88
Trip per passenger	Miles	(NA)	(NA)	(NA)	220.1	223.1	227.6	237.6	248.7	259.0
Freight service:										
Freight revenue	Mil. dol.	10,922	15,390	26,200	25,627	25,835	28,472	26,688	25,344	25,637
Per ton-mile	Cents	1.43	2.04	2.83	3.21	3.20	3.08	3.04	2.92	2.73
Per ton originated	Dollar	7.87	11.40	18.05	20.89	20.66	20.89	21.39	20.82	20.15
Revenue-tones originated	Million	1,485	1,395	1,492	1,269	1,293	1,429	1,320	1,087	1,371
Revenue-tons carried	Million	2,816	2,437	2,434	1,979	1,932	2,119	1,985	1,938	1,926
Tons carried one mile	Billion	785	754	919	798	827	922	877	868	940
Average miles of road operated	1,000	203	205	179	174	170	165	161	155	139
Revenue ton-miles per mile of road	1,000	3,652	3,666	5,133	4,802	4,876	5,578	5,446	5,587	6,772
Revenue per ton-mile	Cents	1,429	2,041	2,852	3,212	3,119	3,090	3,043	2,921	2,728
Train miles	Million	427	402	426	345	346	369	347	347	359
Net ton-miles per train-mile ¹⁰	Number	1,820	1,938	2,175	2,345	2,432	2,543	2,574	2,552	2,648
Net ton-miles per loaded car-mile ¹⁰	Number	44.9	51.7	63.5	58.3	61.2	62.4	62.7	63.2	63.9
Train-miles per train-hour	Miles	20.1	20.0	18.2	21.4	20.3	21.9	21.9	22.5	22.3
Haul per ton, U.S. as a system	Miles	515	541	616	629	641	645	664	664	685
Accident¹¹:										
Persons killed	Number	2,255	1,560	1,417	1,119	1,073	1,247	1,036	1,091	1,165
Persons injured	Number	21,327	54,306	62,246	40,275	34,816	38,570	34,304	26,923	26,023

¹ Represents zero. ² NA Not available. ³ See text, section 21 for definition of class I. ⁴ Average mid-month count.

⁵ Represents the aggregate length of roadway of all line-haul railroads. Excludes yard tracks, sidings, and parallel lines. (Includes estimate for class II and III railroads.) ⁶ Includes multiple main tracks, yard tracks, and sidings owned by both line-haul and switching and terminal. (Includes estimate for class II and III railroads.) ⁷ Excludes Long Island Railroad, which was reclassified.

⁸ Includes cars owned by all railroads, private car companies, and shippers. ⁹ Class I railroads only. ¹⁰ Includes State income taxes beginning 1980. ¹¹ Includes payroll, income, and other taxes. ¹² Revenue and non-revenue freight.

¹³ Includes highway grade crossing casualties. 1970 not comparable with later years due to change in requirements for reporting injuries.

Source: Association of American Railroads, Washington, DC, *Yearbook of Railroad Facts, Statistics of Railroads of Class I*, annual, and *Analysis of Class I Railroads*, annual. Accident data: U.S. Federal Railroad Administration, *Accident Bulletin*, annual.

Railroads

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NO. 1038. RAILROADS, CLASS I—CARS OF REVENUE FREIGHT LOADED, 1960 TO 1987, AND BY COMMODITY GROUP, 1986 AND 1987

[In thousands. Figures are 52-week totals. N.e.c.=Not elsewhere classified]

YEAR	CARLOADS		CARLOADS		CARLOADS						
	Total	Piggy-back	COMMODITY GROUP		1986	1987	COMMODITY GROUP		1986	1987	
1960.....	30,441	554	Coal	5,725	5,811	Crushed stone, gravel, sand.....	678	746			
1965.....	29,248	1,077	Metallic ores.....	798	846	Nonmetallic minerals, n.e.c.....	475	490			
1970.....	27,180	1,450	Chemicals, allied products.....	1,273	1,370	Waste and scrap materials.....	413	452			
1975.....	23,217	1,308	Grain.....	1,268	1,505	Lumber, wood products (exc. furniture), n.e.c.....	397	419			
1980.....	22,598	1,661	Motor vehicles and equipment.....	1,038	980	Forwarder/shipper assoc. traffic.....	198	143			
1981.....	21,613	1,723	Pulp, paper, allied products.....	665	647	Coke.....	218	260			
1982.....	18,498	1,920	Primary forest products.....	535	544	Petroleum product.....	241	250			
1983.....	18,815	2,348	Food and kindred prod., n.e.c.....	583	587	Farm products, exc. grain.....	193	203			
1984.....	20,257	2,703	Grain mill products.....	546	565	Less than carload.....	6	5			
1985.....	19,574	2,863	Metals and products.....	415	472	All other carloads.....	3,628	3,998			
1986.....	19,783	3,279	Stone, clay, and glass products.....	510	539						
1987.....	20,812	3,370									

Source: Association of American Railroads, Washington, DC, *Cars of Revenue Freight Loaded*, annual.

NO. 1039. RAILROADS, CLASS I LINE-HAUL—REVENUE FREIGHT ORIGINATED, BY COMMODITY GROUP: 1970 TO 1987

[See *Historical Statistics, Colonial Times to 1970*, series Q 332, for total carloads originated]

COMMODITY GROUP	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987, prel.
Carloads ¹ (1,000)	27,015	22,930	23,409	22,223	21,343	18,695	19,013	20,946	19,501	19,587	20,802
Coal.....	5,298	4,844	5,329	5,799	5,835	5,718	5,276	6,061	5,684	5,433	5,430
Farm products.....	2,374	1,873	1,721	1,986	1,627	1,688	1,842	1,757	1,494	1,602	1,907
Metallic ores.....	2,706	2,154	1,948	1,767	1,557	1,391	1,316	1,284	1,224	1,276	1,326
Chemicals, allied products.....	1,602	1,338	1,480	1,258	1,354	761	812	1,001	511	508	494
Nonmetallic minerals ²	1,576	1,313	1,471	1,322	1,322	1,120	1,216	1,312	1,296	1,287	1,410
Lumber and wood products ³	2,204	1,895	1,592	1,474	1,272	958	1,079	1,204	1,196	1,113	1,188
Pulp, paper, allied products.....	2,048	1,615	1,565	1,384	1,254	1,002	1,075	1,051	948	965	986
Transportation equipment.....	1,059	1,135	1,278	1,004	939	801	954	1,141	1,202	1,148	1,085
Stone, clay, and glass products.....	1,197	1,015	977	954	899	765	746	741	703	672	561
Primary metal products.....	1,466	798	913	756	760	459	440	487	449	389	428
Stone, clay, and glass products.....	1,231	906	920	776	690	516	543	576	551	530	559
Waste and scrap materials.....	805	744	713	632	610	409	417	480	429	402	440
Petroleum and coal products.....	699	787	716	596	607	467	495	528	491	477	520
Machinery, exc. electrical.....	200	156	90	77	68	43	38	40	35	31	33
Fabricated metal products ⁴	398	244	87	72	55	36	33	37	31	26	24
Tons ¹ (mill.)	1,484.9	1,395.1	1,502.1	1,492.4	1,453.0	1,268.6	1,292.6	1,429.4	1,310.8	1,305.8	1,372.2
Coal.....	404.6	407.6	473.8	522.1	527.6	523.8	493.6	566.6	538.0	517.5	523.3
Farm products.....	134.2	134.4	138.5	156.1	139.9	139.5	142.2	151.1	127.0	136.4	162.9
Metallic ores.....	110.1	100.2	93.2	91.9	82.8	77.0	75.2	72.1	73.5	78.3	81.4
Chemicals, allied products.....	126.7	106.4	119.9	105.4	113.8	92.6	68.4	85.5	46.9	46.4	44.9
Nonmetallic minerals ²	91.6	91.4	112.4	108.3	105.9	91.2	98.3	107.4	106.4	105.6	115.0
Lumber and wood products ³	163.3	150.8	132.3	124.8	110.0	84.7	96.5	108.2	107.7	101.2	109.4
Pulp, paper, allied products.....	101.8	88.6	93.1	85.5	80.3	65.9	71.7	68.8	63.2	64.9	66.8
Transportation equipment.....	24.2	27.3	30.8	23.9	22.2	18.8	22.2	26.1	27.2	25.9	23.9
Primary metal products.....	42.5	40.6	42.4	42.1	41.6	36.4	36.6	37.7	36.2	35.6	35.8
Stone, clay, and glass products.....	82.2	51.4	63.9	52.7	53.3	32.0	32.0	36.1	33.6	29.7	33.4
Waste and scrap materials.....	71.1	56.8	61.5	53.7	49.2	38.2	41.6	44.7	43.5	42.1	44.3
Petroleum and coal products.....	39.8	38.2	38.5	34.3	34.1	22.7	24.5	28.8	25.7	25.0	28.2
Machinery, exc. electrical.....	36.3	45.8	43.9	38.1	39.0	31.6	33.6	35.3	32.9	32.8	34.9
Fabricated metal products ⁴	4.6	3.6	2.3	2.0	1.7	1.2	.8	.9	.8	.8	.8
Gross revenue ¹ (mil. dol.)	11,388	15,899	24,283	26,938	29,590	26,604	26,710	29,888	28,225	27,186	27,857
Coal.....	1,381	2,146	3,872	4,958	5,977	6,307	5,969	6,965	6,556	6,089	6,097
Farm products.....	1,068	1,472	2,101	2,801	2,621	2,305	2,374	2,483	1,977	2,007	2,246
Metallic ores.....	1,363	1,822	2,421	2,837	2,928	2,604	2,349	2,309	2,256	2,192	2,171
Chemicals, allied products.....	333	468	621	597	723	403	450	587	403	375	348
Nonmetallic minerals ²	1,127	1,681	2,739	2,946	3,298	2,942	3,078	3,380	3,342	3,342	3,477
Lumber and wood products ³	409	596	829	948	1,038	852	834	997	949	839	854
Transportation equipment.....	632	1,068	1,546	1,543	1,559	1,303	1,527	1,811	1,525	1,583	1,680
Pulp, paper, allied products.....	734	1,283	2,167	1,917	2,120	1,986	2,292	2,859	3,110	2,997	2,886
Primary metal products.....	730	977	1,445	1,652	1,848	1,717	1,671	1,762	1,841	1,572	1,542
Stone, clay, and glass products.....	813	848	1,291	1,332	1,559	977	816	955	872	787	863
Waste and scrap materials.....	512	651	1,018	1,026	1,114	888	908	1,024	960	907	914
Petroleum and coal products.....	305	573	835	865	1,019	887	844	913	881	800	809
Machinery, exc. electrical.....	148	200	174	176	178	115	75	81	72	58	57
Fabricated metal products ⁴	210	221	117	110	105	71	52	57	46	40	37

¹ Includes commodity groups and small packaged freight shipments, not shown separately.

² Except fuels.

³ Except furniture. ⁴ Except ordnance, machinery, and transport.

Source: 1970-1979, U.S. Interstate Commerce Commission, *Freight Commodity Statistics—Class I Railroads in the United States*, annual; thereafter, Association of American Railroads, Washington, DC, *Freight Commodity Statistics*, annual.

Transportation—Land

No. 1040. RAILROAD FREIGHT—PRODUCER PRICE INDEXES: 1970 TO 1986

[Dec. 1984=100. Reflects prices for shipping a fixed set of commodities under specified and unchanging conditions]

COMMODITY	1970	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Total railroad freight.....	29.1	45.3	53.2	56.9	65.0	75.9	87.4	93.7	95.0	99.3	99.9	100.7
Annual percent change ¹	8.8	13.2	6.8	7.0	14.2	16.8	15.2	7.2	1.4	4.5	.6	.8
Coal.....	26.9	44.0	52.4	56.5	65.9	75.8	86.9	95.4	96.5	99.0	100.0	100.7
Farm products.....	29.7	45.2	52.4	56.1	64.6	75.6	86.3	93.4	94.0	98.7	99.0	99.8
Food and kindred products.....	28.9	44.8	51.9	55.8	63.5	75.2	87.4	93.7	94.8	99.1	100.0	99.9
Metallic ores.....	26.4	43.2	51.2	55.1	63.8	74.5	86.1	93.9	95.9	99.4	100.2	100.5
Chemicals and allied products.....	30.0	46.5	54.3	57.5	64.9	75.6	87.1	93.5	94.3	98.7	100.1	101.2
Nonmetallic minerals.....	25.4	40.5	48.3	52.0	60.6	72.2	86.4	93.3	94.6	98.8	100.1	101.6
Lumber and wood products.....	28.3	42.6	50.1	53.8	61.0	72.7	85.2	91.4	93.3	99.7	100.0	100.9
Transportation equipment.....	31.7	50.3	59.3	63.1	71.5	81.7	91.6	94.5	95.6	99.8	100.0	100.8
Pulp, paper, and allied products.....	31.5	47.1	53.9	57.0	64.7	76.7	88.5	94.7	95.6	99.9	100.0	101.0
Primary metal products.....	29.9	47.8	56.0	59.5	67.5	77.8	88.5	94.3	95.4	99.7	99.7	100.2
Stone, clay, concrete, glass products.....	26.9	43.0	50.9	55.0	62.8	74.2	86.5	93.4	94.4	98.8	100.0	102.2

¹ Change from prior year.Source: U.S. Bureau of Labor Statistics, *Producer Prices and Price Indexes*, monthly and annual.

No. 1041. PETROLEUM PIPELINE COMPANIES—CHARACTERISTICS: 1975 TO 1986

[1975, covers pipeline companies operating in interstate commerce and subject to jurisdiction of Interstate Commerce Commission; thereafter, Federal Energy Regulatory Commission]

ITEM	Unit	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Miles of pipeline, total.....	1,000.....	170.7	164.5	161.6	169.8	172.7	172.8	172.5	167.8	173.9	171.4	170.0
Gathering lines.....	1,000.....	40.4	34.7	36.5	36.9	36.3	38.6	35.6	31.0	36.1	35.0	34.2
Trunk lines.....	1,000.....	130.3	119.8	125.1	132.9	136.4	134.2	136.9	136.9	137.8	138.4	135.8
Total deliveries.....	Mill. bbl.....	9,391	10,019	10,768	11,140	10,600	10,223	10,181	10,310	10,224	10,745	11,002
Crude oil.....	Mill. bbl.....	5,729	6,089	6,550	6,728	6,405	6,070	5,968	6,020	5,871	6,239	6,288
Products.....	Mill. bbl.....	3,662	3,930	4,218	4,412	4,195	4,153	4,213	4,289	4,552	4,506	4,716
Total trunk line traffic.....	Bil. bbl-miles.....	2,892	3,895	3,723	3,577	3,405	3,554	3,442	3,328	3,406	3,342	3,467
Crude oil.....	Bil. bbl-miles.....	1,551	2,267	2,031	1,946	1,948	1,813	1,938	1,875	1,855	1,842	1,883
Products.....	Bil. bbl-miles.....	1,341	1,627	1,691	1,831	1,458	1,740	1,484	1,452	1,551	1,500	1,573
Carrier property value.....	Mil. dol.....	10,740	16,736	17,654	18,990	19,752	21,250	21,942	22,255	19,397	21,605	22,384
Operating revenues.....	Mil. dol.....	1,863	2,818	4,980	5,781	6,356	6,678	7,140	7,472	7,824	7,461	7,287
Net income.....	Mil. dol.....	455	478	1,696	1,648	1,912	2,031	2,162	2,353	2,545	2,431	2,051

Source: PennWell Publishing Co., Tulsa, Okla., *Oil and Gas Journal*, November 23, 1987 and earlier issues. (Copyright.)

No. 1042. MAJOR INTERSTATE NATURAL GAS PIPELINE COMPANIES—SUMMARY: 1980 TO 1986

[Major natural gas pipeline companies are those whose combined sales for resale and natural gas transported or stored for a fee exceed 50 billion cubic feet. They account for more than 85 percent of all interstate natural gas]

ITEM	Unit	1980	1981	1982	1983	1984	1985	1986
Sales.....	Trl. cu. ft.....	(NA)	15.2	14.4	12.9	13.2	11.3	7.8
Residential.....	Trl. cu. ft.....	(NA)	.1	.3	.3	.3	.3	.2
Commercial, industrial.....	Trl. cu. ft.....	(NA)	1.1	1.2	1.0	1.2	1.1	.5
For resale.....	Trl. cu. ft.....	(NA)	14.1	13.0	11.6	11.6	9.9	7.1
Operating revenues.....	Mil. dol.....	46,485	56,203	56,792	56,326	49,106	33,859	
From sales ¹	Mil. dol.....	44,277	53,601	53,710	52,529	44,996	29,508	
Residential.....	Mil. dol.....	204	1,273	1,725	1,927	1,879	1,122	
Commercial, industrial.....	Mil. dol.....	3,336	4,453	4,233	5,180	4,466	1,909	
For resale.....	Mil. dol.....	40,877	47,776	47,661	45,268	38,545	26,662	
From transportation of gas to others.....	Mil. dol.....	1,011	1,259	1,787	1,923	2,272	3,027	
Other.....	Mil. dol.....	1,177	1,344	1,286	1,874	1,838	1,325	
Operation, maintenance expenses.....	Mil. dol.....	33,303	41,242	49,899	49,391	48,411	42,528	27,460
Production.....	Mil. dol.....	28,644	38,708	44,449	43,516	42,407	36,739	22,208
Storage.....	Mil. dol.....	253	313	405	441	415	418	420
Transmission.....	Mil. dol.....	2,431	3,122	3,629	3,729	3,760	3,409	2,597
Distribution.....	Mil. dol.....	28	31	103	131	131	132	80
Administrative, general, and other.....	Mil. dol.....	847	1,070	1,402	1,576	1,697	1,830	2,155
Pipeline mileage:								
Transmission lines.....	1,000.....	(NA)	(NA)	178.0	176.7	183.4	189.7	184.6
Field lines.....	1,000.....	(NA)	(NA)	64.6	63.7	65.2	69.6	64.5
Storage.....	1,000.....	(NA)	(NA)	6.9	6.5	4.6	4.8	4.6

NA Not available. ¹ Includes other ultimate customers not shown separately.Source: U.S. Energy Information Administration, *Statistics of Interstate Natural Gas Pipeline Companies*, annual.